UNIVERSITY OF BRIDGEPORT

Catalog 1997-1998

University of Bridgeport

1997-1998 CATALOG

126 PARK AVENUE, BRIDGEPORT, CT 06601

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FAX: (203) 576-4941

The University of Bridgeport admits students regardless of sex, race, color, creed, or national or ethnic origin to all the rights, privileges, programs and activities generally accorded or made available to students of the University. The University of Bridgeport does not discriminate on the basis of gender, sexual orientation, age, race, color, national or ethnic origin, creed, political affiliation, or handicap in the administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other University administered programs. The University of Bridgeport is an equal opportunity employer.

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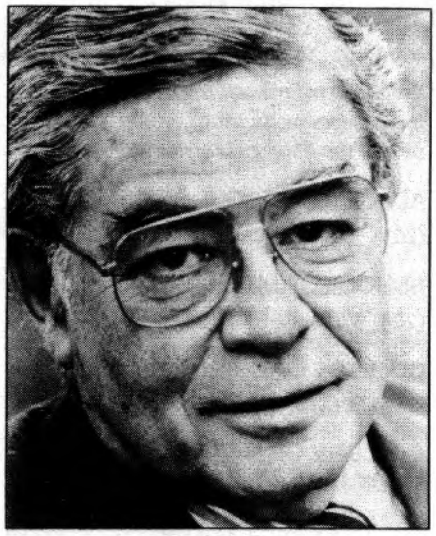
President's Message



As I meet people, both in Fairfield County and when I travel, I am frequently asked "What kind of University do you envision when you think of UB?" Invariably, I answer that I see UB as an international University training leaders for the global civilization of the twenty-first century. All of America has been affected by the global marketplace. Because of its character as an international University, a source of knowledge, information and training, UB is uniquely equipped to meet this unfolding challenge in the information age. In this new and revolutionary era, we will either be passive objects of change or creative agents of transformation. It is the mission of UB to train those who join with us in the enterprise of learning to become the latter.

In choosing UB you have chosen well. Let us join together in our common endeavor.

Sincerely,

Richard L. Rubenstein

Richard L. Rubenstein
President

Correspondence

Mailing Address

UNIVERSITY OF BRIDGEPORT

Bridgeport, Connecticut 06601

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UB-STAMFORD CENTER

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Stamford, CT 06907-585

(203) 358-0700
Fax Number (203) 967-3735

Specific inquiries should be addressed as follows:

ADMISSIONS INFORMATION

Office of Admissions
126 Park Avenue
Bridgeport, CT 06601

1-800-EXCEL-UB
(203) 576-4552
Fax Number (203) 576-4941
E-mail: admit@cse.bridgeport.edu

SCHOLARSHIPS AND FINANCIAL AID ASSISTANCE

Office of Financial Aid
(203) 576-4568
E-mail: yoia@cse.bridgeport.edu

STUDENT DEVELOPMENT

Dean of Students
(203) 576-4395

BILLING INFORMATION AND PAYMENTS

Bursar (203) 576-4472

TRANSCRIPTS AND ACADEMIC RECORDS

Office of the Registrar
(203) 576-4636
Fax Number (203) 576-4941

For more information specific to one of the colleges or divisions, you may write or call the appropriate dean or director.

ACADEMIC RESOURCE CENTER

(203) 576-4290

SCHOOL OF BUSINESS

(203) 576-4384

COLLEGE OF CHIROPRACTIC

(203) 576-4279

COLLEGE OF NATUROPATHIC MEDICINE

(203) 576-4109
Fax Number (203) 576-4107

COLLEGE OF GRADUATE & UNDERGRADUATE STUDIES

(203) 576-4664
Fax Number (203) 576-4661

SCHOOL OF SCIENCE, ENGINEERING & TECHNOLOGY

(203) 576-4111

SCHOOL OF EDUCATION AND HUMAN RESOURCES

(203) 576-4192, 576-4175

ENGLISH LANGUAGE INSTITUTE

(203) 576-4860
Fax Number (203) 576-4861

HONORS COLLEGE

(203) 576-4398

FONES SCHOOL OF DENTAL HYGIENE

(203) 576-4138

SCHOOL OF GENERAL STUDIES

(203) 576-4958

DIVISION OF HEALTH TECHNOLOGY

(203) 576-4589

SCHOOL OF ARTS, HUMANITIES, AND SOCIAL SCIENCES

(203) 576-4239/4709
Fax Number (203) 576-4051

IDEAL PROGRAM

(203) 576-4800

NUTRITION INSTITUTE

(203) 576-4667

For all other information,
Call (203) 576-4000

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Academic Calendar

Fall Semester 1997

Tuesday, August 26, 5:30-7:30 p.m.
Open House and Registration with Advisors
Stamford Center (Riverbend)

Wednesday, August 27
International Student Orientation

Thursday, August 28, 5:30-7:30 p.m.
Open House and Registration with Advisors
Main Campus
Wahlstrom Library, sixth floor

Thursday-Monnday, August 28-September 1
New Student Orientation

Monday, September 1
Holiday, No Classes (Labor Day)

Tuesday, September 2, 1:00 p.m.-8:00 p.m.
New Student Registration
Wahlstrom Library, sixth floor

Wednesday, September 3
Classes Begin

Wednesday-Wednesday, September 3-10
Change of Schedule

Thursday, September 4, 4:30-7:00 p.m.
Late Registration
Wahlstrom Library, sixth floor

Thursday, September 4, 2:30-3:30 p.m.
Convocation

Wednesday, September 10
Last Day to Elect Pass-Fail Option

Wednesday, September 17
Last Day to Add Courses

Wednesday, September 17
Last Day to Apply for December 1997 Graduation

Wednesday, September 24
Last Day to Drop Courses
(Without Penalty - No "W" grade)

Saturday-Tuesday, October 11-14
Mid-Semester Fall Break

Monday-Friday, October 20-October 24
Mid-Semester Week

Wednesday, October 29
Mid-Semester Grades Due

Friday, November 7
Last Day to Withdraw from Classes

Monday-Friday, November 17-21
Early Registration for Spring 1998

Friday, November 14
Last Day to apply for May 1998 Graduation

Thursday-Sunday,
November 27-November 30
Thanksgiving Recess

Friday, December 12
Last Day of Classes

Saturday-Sunday, December 13-14
Reading Period

Monday-Friday, December 15-19
Final Exam Week

Monday, December 22, 12:00 Noon
Deadline for Final Grades

Academic Calendar

Spring Semester 1998

Tuesday, January 20, 5:30-7:30 p.m.
Open House and Registration w/Advisors
Stamford Center (Riverbend)

Wednesday, January 21, 5:30-7:30 p.m.
Open House and Registration w/Advisors
Main Campus
Wahlstrom Library, 6th floor

Wednesday, January 21, 5:30-7:30 p.m.
International Student Orientation

Thursday-Sunday, January 22-25
New Student Orientation

Sunday, January 25, 9:00 a.m.-1:00 p.m.
New Student Registration
Wahlstrom Library, 6th floor

Monday, January 26
Classes Begin

Monday-Friday, January 26-30
Change of Schedule

Tuesday, January 27, 4:30-7:00 p.m.
Late Registration
Wahlstrom Library, 6th floor

Friday, January 30
Last Day for Readmission Application

Friday, February 6
Last Day to Elect Pass-Fail Option

Friday, February 6
Last Day to Add Courses

Friday, February 13
Last Day to Apply for
May 1998 Graduation

Friday, February 13
Last Day to Drop Classes (No "W" Grade)

Monday-Friday, March 9-13
Mid-Semester Week

Saturday-Sunday, March 14-22
Spring Break

Wednesday, March 18
Mid-Semester Grades Due

Friday, April 3
Last Day to Withdraw from Classes

Monday-Friday, April 13-17
Early Registration for Fall 1998

Friday, April 17
Last Day to Apply for
August 1998 Graduation

Friday, May 8
Last Day of Classes

Saturday-Sunday, May 9-10
Reading Period

Monday-Friday, May 11-15
Final Exam Week

Sunday, May 17
Commencement

Monday, May 18, 12:00 Noon
Deadline for Final Grades

College of Chiropractic Calendar

Fall Semester 1997

Friday, August 15
Orientation/Registration

Monday, August 18
Classes Begin Semester I, II, III, IV, V, VI, VII

Monday, September 1
Labor Day (Holiday)

Friday-Sunday, September 5-7
National Board Examinations

Wednesday-Friday, November 26-28
Thanksgiving Holiday

Monday-Friday, December 1-5
Spring Registration

Monday, December 15
Final Exams Begin (Semester and Trimester)

Monday, December 16
Final Exams Begin

Friday, December 19
Final Exams End

Spring Semester 1998

Tuesday, January 6
Application Deadline for Spring National Board Examinations

Friday, January 9
Orientation/Registration

Monday, January 12
Classes Begin Semester I, II, III, IV, V, VI, VII, VIII

Monday, January 19
Martin Luther King Jr. Day (Holiday)

Friday-Sunday, March 13-15
National Board Examinations

Monday-Friday, March 16-20
Spring Break

Monday-Friday, April 20-24
Fall Registration

Sunday, April 27
Graduation

Monday, May 18
Final Exams Begin

Friday, May 22
Final Exams End

Sunday, May 24
Graduation

Monday, May 25-Friday, August 14
Clinic Summer Session
Semester VII & VIII

College of Naturopathic Medicine Calendar

Fall Semester 1997

Friday, August 15
Orientation/Registration

Monday, August 18
Classes Begin Semester I

Monday, September 1
Labor Day (Holiday)

Wednesday - Friday, November 26-28
Thanksgiving Holiday

Monday-Friday, December 1-5
Spring Registration

Monday, December 15
Final Exams Begin

Friday, December 19
Final Exams End

Fall Semester 1998

Friday, August 14
Orientation/Registration

Monday, August 17
Classes Begin I - III

Monday, September 7
Labor Day (Holiday)

Wednesday-Friday, November 25-27
Thanksgiving Holiday

Monday-Friday, November 30-December 4
Spring Registration

Monday, December 14
Final Exams Begin

Friday, December 18
Final Exams End

Spring Semester 1998

Friday, January 10
Orientation/Registration

Monday, January 12
Classes Begin Semester I, II

Monday, January 19
Martin Luther King Jr. Day (Holiday

Monday - Friday, March 16-20
Spring Break

Monday-Friday, April 20-24
Fall Registration

Monday, May 18
Final Exams Begin

Friday, May 22
Final Exams End

Spring Semester 1999

Friday, January 8
Orientation/Registration

Monday, January 11
Classes Begin Semester I-IV

Monday, January 18
Martin Luther King Jr. Day (Holiday

Monday - Friday, March 22-26
Spring Break

Monday-Friday, April 19-23
Fall Registration

Monday, May 17
Final Exams Begin

Friday, May 21
Final Exams End

Residence Halls Calendar

Fall Semester 1997

Thursday, August 14, 10:00 a.m.
Residence Halls Open for Chiropractic Students

Wednesday, August 27, 10:00 a.m.
Residence Halls Open for New International Students

Thursday, August 28, 10:00 a.m.
Residence Halls Open for New Domestic Students

Tuesday, September 2, 10:00 a.m.
Residence Halls Open for Returning Students

Spring Semester 1998

Thursday, January 8, 10:00 a.m.
Residence Halls Open for New Chiropractic Students

Wednesday, January 21, 10:00 a.m.
Residence Halls Open for New International Students

Thursday, January 22, 1998
Residence Halls Open for New Domestic Students

Sunday, January 25, 1998
Residence Halls Open for All Returning Students

All non-graduating students must vacate their residence hall within 24 hours after their last final or when the residence halls are officially closed, whichever occurs first.

The Residence Halls close for graduating Chiropractic students on May 25, noon.

There is one 12-month Residence Hall which will be open during all vacations, breaks and for the summer. Interested students may sign-up in advance for this hall. Space is on a first come – first served basis.

Students remaining in the residence halls during winter break will be required to pay an additional fee.

Programs of Study

Undergraduate Programs

SCHOOL OF ARTS, HUMANITIES, AND SOCIAL SCIENCES*

Graphic Design (B.F.A.)
Illustration (B.F.A.)
Industrial Design (B.S.)
Interior Design (B.S.)
Literature and Civilization (B.A.)
- Creative Writing
- English
- History
- Philosophy

Mass Communication (B.A.)
- Advertising
- Communication Studies
- Journalism
- Public Relations

Music (B.Mus.)
- Jazz Studies
- Music Education
- Music Performance
- Music Business

Social Sciences (B.A.)
- History
- International Studies
- Political Science
- Psychology
- Sociology

SCHOOL OF BUSINESS*

Accounting (B.S.)
Business Administration (A.A., B.S.)
Business Administration/
- Legal Administration (B.S.)

Computer Applications & Information
- Systems (B.S.)

Fashion Merchandising & Retailing
- (A.A., B.S.)

Finance (B.S.)
International Business (B.S.)
Legal Assistant (A.A.)
Management & Industrial Relations (B.S.)
Marketing (B.S.)

SCHOOL OF EDUCATION AND HUMAN RESOURCES*

Human Services (B.S.)
Minor in Education

SCHOOL OF GENERAL STUDIES*

Elective Studies (B.E.S.)
General Studies (A.A., A.S.)
IDEAL Program (B.E.S.)
(Accelerated Degree Program for Adults)

SCHOOL OF SCIENCE, ENGINEERING & TECHNOLOGY*

Biology (B.A., B.S.)
Computer Engineering (B.S.)
Computer Science (B.S.)
Mathematics (B.A., B.S.)

DIVISION OF HEALTH TECHNOLOGY

Medical Technology (B.S.)

FONES SCHOOL OF DENTAL HYGIENE

Dental Hygiene (A.S., B.S.)

Graduate Programs

SCHOOL OF BUSINESS*

Business Administration (M.B.A.)

SCHOOL OF EDUCATION AND HUMAN RESOURCES*

Counseling and Human Resources (M.S.)
- Agency Counseling
- Human Resource Development

Counseling (6th year)
Education (M.S.)
Educational Administration &
- Supervision (6th year)

Educational Leadership (Ed.D.)
Elementary Education (6th Year)
Secondary Education (6th Year)

SCHOOL OF SCIENCE, ENGINEERING & TECHNOLOGY*

Computer Engineering (M.S.)
Computer Science (M.S.)
Electrical Engineering (M.S.)
Management Engineering (M.S.)
Mechanical Engineering (M.S.)

COLLEGE OF CHIROPRACTIC

Chiropractic (D.C.)

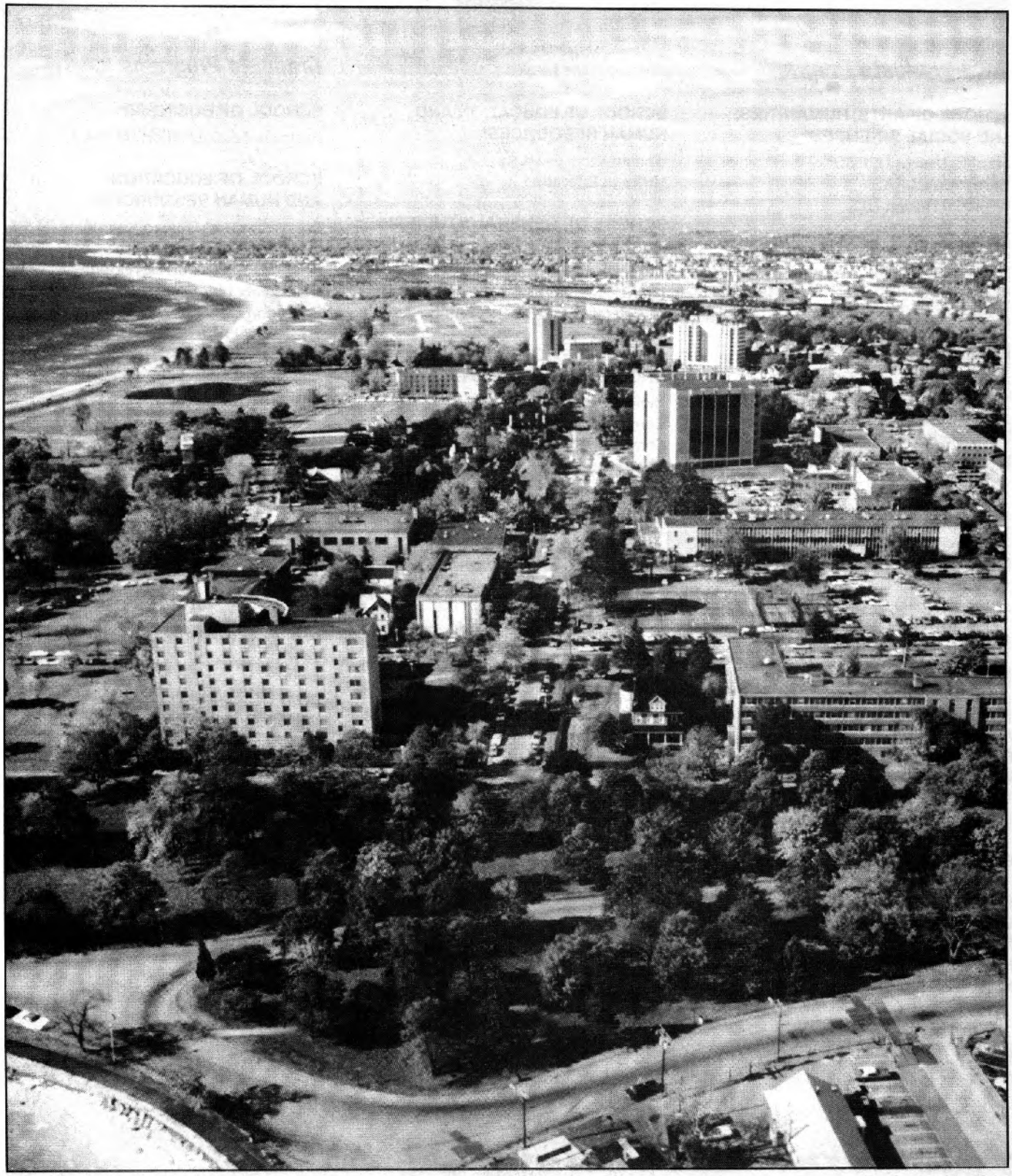
COLLEGE OF NATUROPATHIC MEDICINE

Naturopathic Medicine (N.D.)

NUTRITION INSTITUTE

Human Nutrition (M.S.)

**These schools are part of the College of Graduate and Undergraduate Studies.*



General Information

Introduction

Mission

The University of Bridgeport is an independent, non-sectarian, international institution of higher learning, dedicated to career enhancing, quality education in keeping with its long-standing tradition of individual concern for each student's distinctive needs. In harmony with an intellectually diverse general curriculum, the University's professional degree programs prepare its students for the vocations and leadership roles they will assume in an increasingly interdependent world. The University's interdisciplinary education thus incorporates local and national perspectives within a global context.

The University encourages the development of highly trained, mature, and independent men and women. It places particular emphasis on the importance of its students' assumption of personal responsibility and moral commitment in the conduct of life and on the preservation and strengthening of the highest values and ethical norms.

Seeking to foster global understanding and cooperation, the University gathers together a student body consisting of talented, aspiring and ambitious domestic and foreign students of every race, religion and creed. Situated on the Connecticut shores of Long Island Sound, in an urban New England region, the University reflects a broad array of intellectual and cultural traditions. As a participant in the life of the Bridgeport community, the University is committed to using its resources in the service of this city and other urban centers. To that end, the University prepares its student to think clearly and work confidently for the betterment of their communities.

History

The University of Bridgeport was founded in 1927 as the Junior College of Connecticut — the first junior college chartered by any legislature in the northeastern states. The college had as its purpose, in the words of the founders, to develop in students "a point of view and a habit of mind that promotes clear thinking and sound judgment in later professional and business experience." Although UB has changed in many ways since then, this commitment to student preparation and community service remains central to its mission.

The Junior College of Connecticut became the University of Bridgeport in 1947, when the Governor of Connecticut chartered the institution as a four-year university with authority to grant the baccalaureate degree. By that time, the former Barnum estate at Seaside Park had been purchased and growth in students, faculty, programs and buildings was rapid. The College of Arts and Sciences and the College of Business were added at once, and the colleges of Nursing, Education, and Engineering soon after. The Junior College expanded its offerings through a merger with the Weylister Secretarial Junior College of Milford, Connecticut, and through the addition of the Fones School of Dental Hygiene (at its inception in 1949 the only such school in Connecticut and the second in New England).

By 1950, the University had moved from the original Fairfield Avenue location to the present Seaside Park campus, which has since grown from 22 to 86 acres. Enrollment was nearly 3,500 students, including a number of international students, taught by a faculty of 183 men and women. In 1951 the University awarded its first Master's degree.

In 1953 the University expanded its programs when Arnold College, the oldest coeducational school of physical education in the United States, merged with and was incorporated into the College of Education.

In January 1979 UB inaugurated its first doctoral degree program, Educational Leadership; and in 1991 the College of Chiropractic was established, representing the first affiliation of a chiropractic school with a university in the United States.

In 1996 the University established the College of Naturopathic Medicine.

University of Bridgeport Today

Significant financial support from the Professors World Peace Academy (PWPA), a non-profit international organization of academicians dedicated to world peace through education, has enabled the University to continue a commitment to excellence while maintaining a great tradition of the liberal arts and its professional programs to respond to the changing needs of society. Programs are focused so that students receive the kind of personal advising and attention usually found only at small colleges. Furthermore, the University takes full advantage of its location in a progressive urban setting, using regional resources as "living laboratories" to supplement the traditional academic instruction offered on the campus. Through co-operative education programs, students can learn from experience by integrating classroom studies on campus with supervised employment in industrial, service, and government sectors.

The College of Graduate and Undergraduate Studies (incorporating Schools of Business; Education and Human Resources; General Studies; Arts, Humanities, and Social Sciences; and Science, Engineering and Technology), plus the Fones School of Dental Hygiene offers a variety of undergraduate and graduate degree programs from associate through doctoral levels. In addition, the University's College of Chiropractic awards the Doctor of Chiropractic degree and the College of Naturopathic Medicine awards the Doctor of Naturopathic Medicine.

The IDEAL Program of the School of General Studies offers undergraduate and graduate courses with flexible scheduling for part-time adult students, at the main campus, at the branch campus in Stamford, CT, and in Trumbull, CT.

The University sees its student body as a valuable resource. Approximately 2,400 students were enrolled in 1996-1997,

two-thirds of whom are full-time, coming from 30 states and 65 foreign countries and representing a rich diversity of racial and cultural backgrounds.

Faculty

The UB faculty includes a number of distinguished scholars. Richard S. Allen, Charles A. Dana Professor of English and a prolific poet, has been regularly featured in the *Yale Review, The Kenyon Review,* and *New Yorker Magazine.* Justus M. van der Kroef, Dana Professor Emeritus of Political Science and respected author, continues to teach courses in political science, history, and philosophy, while also serving as Managing Editor of *Asian Thought and Society.* Tarek Sobh, associate professor of computer science and engineering, is chair of the discrete event dynamics system technical committee of the IEEE robotics and automation society, and is the editor of 2 special issues of the international journal of science and technology. Milt Greenhalgh, a UB alumnus and Chemistry lecturer, is recognized for his more than 20 patented inventions as well as for his major contributions to the field of polymer chemistry for which he was awarded General Electric's coveted Coffin Award. Stoyan Ganev, currently a Visiting Professor at the University, formerly served as Foreign Minister of Bulgaria and as President of the General Assembly of the United Nations from 1992 to 1993.

There are 200 full- and part-time faculty members. Nearly all permanent faculty hold doctoral or terminal degrees in their fields. Faculty honors include Fulbright Scholars, National Science Foundation Fellows, Ford Fellows, National Endowment for the Humanities Fellows, American Council for Learned Societies Scholars, Phi Beta Kappa Scholars, Phi Kappa Phi Scholars and Sigma Xi Scholars.

Accreditations and Memberships

The University of Bridgeport is fully accredited by the New England Association of Schools and Colleges.

The University also is accredited by the Board of Governors of the Connecticut Department of Higher Education. National accreditations of professional programs have been granted by the following accrediting bodies in the areas noted:

Council of Dental Education of the American Dental Association - associate (A.S.) degree program in Dental Hygiene.

Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology — baccalaureate (B.S.) degree program in Computer Engineering.

Commission on Accreditation of the Council on Chiropractic Education — doctoral (D.C.) degree program in chiropractic.

The University of Bridgeport is an accredited institutional member of the National Association of Schools of Art and Design.

Through membership in the New England Association of Schools and Colleges, accreditation is given for the pre-medical and pre-dental programs.

The Association of Collegiate Business Schools and Programs have accredited the Bachelor of Science (B.S.) and the Master of Business Administration (M.B.A.) programs. Business programs have also been approved for pre-law study by the Connecticut State Bar Examining Committee and the accounting program has been registered by the New York State Board of Regents.

The University holds membership in the American Council on Education, the Association of Urban Universities, the American Association on University Women, the American Association of Community and Junior Colleges, the American Association of Colleges for Teacher Education, the Association of Evening Colleges, the Connecticut Council on Higher Education, the New England Association of Junior Colleges, the Connecticut Conference of Independent Colleges, the Association of American Colleges, the Council of Graduate Schools, the College Board, and the National Council of Equal Opportunity Programs.

Campus and Campus History

The University of Bridgeport is located fifty-five miles from New York City in Fairfield County, Connecticut. Bridgeport, Connecticut's largest city, borders the 86-acre campus to the north; Seaside Park and Long Island Sound, with some of the finest sandy beaches between New York and Cape Cod, mark the southern boundary. The unique location of the campus offers a variety of advantages to the University community. The Sound and the Park are settings for studies in marine biology and for the enjoyment of sun and recreation. The city and county provide opportunites for becoming involved in work-study programs with schools, government and some of the country's largest corporations.

The architectural diversity of UB's seventy-five buildings, from stately homes as well as newer structures of very modern design, reflects the origins and progress of the university and also embodies its two-fold commitment to solidity and change. The entrance to ***Marina Dining Hall***, was once the entrance arch to the estate of Phineas Taylor Barnum, who served as Mayor of Bridgeport from 1875 to 1876 and played a crucial role in the city's cultural and economic development. ***Bryant Hall***, with its inlaid mosaic entryway and ornately carved banisters and ceilings, was built in 1895 for inventor Waldo C. Bryant. The ***Carstensen Hall*** is a facsimile of a pavilion at the 1893 Columbian Exposition. It was designed in 1899 for the chemist George Edwards, whose research led to improving the durability of silver plate. Between the campus and Seaside Park is the ***Perry Arch***, designed by Henry Bacon, who also designed the Lincoln Memorial in Washington D.C. Directly across the street from Wahlstrom Library is the ***Wheeler House***,

originally owned by George Wheeler, who served as the Chief Justice of the Connecticut State Supreme Court.

The more modern buildings house academic and student life on campus:

The ***Arnold Bernhard Arts and Humanities Center*** is a focal point for the cultural life of the University and of the Greater Bridgeport community, as well as the center for the study and appreciation of art, music, cinema, fashion design and drama. Facilities include classrooms, studios, the 950-seat ***Andre and Clara Mertens Theater***, the small in-the-round experimental ***Austin W. Mather Theatre***, the ***Littlefield Recital Hall***, and the ***Art Gallery***. Located on the ninth floor is the ***Henry B. duPont III Tower Room***, used for meetings and receptions.

The ***John J. Cox Student Center*** provides social, recreational, and extracurricular cultural programs. It has a social hall with a seating capacity of 400; lounges and meeting rooms; a games room and bowling alley; the office of ***The Scribe*** (the campus newspaper); the studio and transmitter of WPKN (an independent non-commercial FM radio station); and offices of the Student Congress and student clubs and organizations, as well as offices of the Student Development division.

The ***Charles A. Dana Hall of Science*** is designed for study and research in biology, chemistry, physics, geology, and computer science. There is a 285-seat lecture auditorium, and the unique Science Wall of Honor commemorating thirty-seven of the world's "Immortals of Science."

Eleanor Naylor Dana Hall provides facilities for the Fones School of Dental Hygiene and the graduate program in Human Nutrition.

The ***Harvey Hubbell Gymnasium*** is the center for intercollegiate sports programs, and the general physical education activities of the University. It seats 2,500 spectators.

Mandeville Hall houses the School of Business and a major computer laboratory. It also contains the ***Jacobson Wing***, equipped for multi-media presentations.

The ***College of Chiropractic Building*** has class and conference rooms, offices, a laboratory, and an auditorium seating two hundred people. It is equipped with the modern facilities necessary for the professional programs offered by the Chiropractic faculty.

The ***Technology Building*** provides the engineering disciplines with the special capabilities and equipment needed for programs in mechanical, electrical and computer engineering.

Breul Hall is home to the University's Computing Center and academic programs in the arts, humanities and social sciences.

The ***Magnus Wahlstrom Library*** is the academic and physical heart of the campus. The nine-story building is home to many different types of information resources, collections, and services.

The ***Wheeler Recreation Center*** offers opportunities for students to enjoy recreational sports. Wheeler has a 25-meter pool with one-meter and three-meter diving boards and adjacent steam room and sauna facilities. The field house has a multi-purpose area for tennis, basketball, and volleyball, with a jogging track around the perimeter. In addition, there are courts for racquetball and handball.

Security Services

The University offers a combination of security services that include a Burns International, Inc. managed public safety force, escort services, and twenty-four-hour monitored access to all residence halls.

PAD SYSTEM

Each full-time student at the University is provided a small personal alarm device (PAD) that allows one to signal for help instantly from anywhere on campus in an emergency. Small and easily carried, a student summons help with the touch of a button. The signal sends information about who the student is and where that student is located to a central computer in the Campus Security Office. Assistance will be on its way in a short period of time.

Social and Cultural Opportunities

Cultural events at the University of Bridgeport offer entertainment of high quality. Art exhibits, theatre productions, dance ensembles, classic cinema, lectures and concerts by UB groups, including the Jazz Ensemble are regularly scheduled.

Special programs in the fine arts bring distinguished visitors to campus each year. The Mertens Contemporary Composers Festival honors significant living American composers in a campus appearance featuring lectures on and performances of their work. Two recent honorees were Stephen Sondheim and the late Leonard Bernstein. The Lucille Lortel Distinguished Guest Artist Series has brought such theatre luminaries as Geraldine Fitzgerald and June Havoc to campus and underwrites occasional bus trips to Off-Broadway theaters.

Special events include a diverse selection of music, theater, dance and art exhibitions. Many of the artists spend days in residence giving classes and lecture-demonstrations prior to their performances. Past seasons have brought the Kronos Quartet, cellist Yo Yo Ma, The San Francisco Mime Troupe, The Ohio Ballet, clarinetist Richard Stoltzman, The Negro Ensemble Company and Chuck Mangione. The Art Gallery mounts exhibitions in sculpture, photography, graphics, painting and illustration and an annual Student Art Exhibit.

Student organizations of the University plan a wide range of social programs from the weekly movies to mixers, rock concerts, international festivals, lectures and comedy acts.

The University's schedule of events in the fine and performing arts is complemented by its location in the center of Fairfield County, one of the country's most desirable recreational and cultural areas. New England village greens and historic communities are within easy reach of the campus. The Southern Connecticut area is home to the Westport Country Playhouse and New Haven's Long Wharf and Yale Repertory theatres. The unlimited cultural

resources of New York and Boston are within convenient traveling distance by car, bus, or train.

International Activities and Study Abroad

The University of Bridgeport offers a wide range of opportunities for students to learn about other cultures and to understand American culture. Students from 60 countries attend the University. Through formal events such as the annual International Festival and The World Scope Series sponsored by the Office of International Affairs and the International Relations Club, and through informal contacts in and out of class, students from different cultures are able to meet and get to know one another.

STUDY ABROAD

There is opportunity for foreign study and travel. Students may choose to spend a summer, a semester, or an entire academic year abroad. They may receive credit for work done at a foreign university provided they follow the usual procedure of obtaining permission to take courses off-campus. In the past, students have pursued such programs at The Institute for American Universities in Aix-en-Provence, France, The American College in Paris, University of Grenoble, University of Madrid, University of Valencia, the Young Judea Year Course in Israel, and The London School of Economics. Students interested in such programs should consult with their department chair.

Through the Italian HISP committee a scholarship is awarded for a summer program in Italy at the University of Siena.

Computing Facilities

Academic computing facilities are located throughout the campus. Computers in most laboratories are connected via local area networks. Microcomputer laboratories are located in many schools and departments, including Business, Science and Engineering. A wide variety of computer programs are available on IBM PCs, Machintoshes and Sun Sparc workstations. Some of the programs available are: compilers, CAD/CAM, CASE tools, databases, simulators, word processors, statistical analysis software. Also avaiable are state of art packages like Mentor Graphics, Oracle and Comnet.

The University Academic Computing Network, UBNet, links the computers in the School of Science, Engineering and Technology and the main dormitory, Bodine Hall together with the University's high speed connection to the Internet. Implementation is underway to expand UBnet to connect various campus buildings via fiber optic cables.

UBnet is primarily a TCP/IP, Client-Server based network, although other networking protocols like IPX and apple talk are also supported. The Main operating systems in use are Unix and WindowsNT. Plans are underway to migrate the UBnet backbones to support Fast Ethernet Switching, ATM and Sonet technologies.

UBnet is operational 24 hours a day year around. Students can connect to systems via Ethernet connections on their dorm rooms, dialup accedd or obtain 24 hours permits to various computer laboratories on request.

University Library

University Librarian
Karen R. Smiga

Magnus Wahlstrom Library
Second Floor, Administration Office
126 Park Avenue Bridgeport, CT 06601
Tel: (203) 576-4740 Fax: (203) 576-4791

Facilities and Resources

The Magnus Wahlstrom Library, which occupies six of the nine air-conditioned floors in the Wahlstrom Building, supports student/faculty research with over 275,000 volumes of books and bound journals/indexes, over 1,000,000 microforms, more than 1,590 periodical/series subscriptions, and a focused collection of educational videos and music CDs supportive of the curriculum.

The Library has open stacks for easy access and browsing and is open more than 77 hours a week, including evening and weekend hours, during the regular academic year. Additional hours are added "for study only" during final exams. Lockers are available to provide convenient, secured storage.

Library Services

INSTRUCTION/ORIENTATION

The Reference Department and the Circulation Department on the first floor are central service points to assist patrons in locating the resources/services they need.

Bibliographic instruction, in general and by research subject areas, is offered by Reference Librarians to individuals and to classes and other groups. Training sessions on how to search specific online databases, such as FirstSearch and Lexis/Nexis, are also offered. For new students, library orientation sessions are scheduled.

ACCESSING RESOURCES

REMOTE ACCESS

The Library's web page can be accessed either from the University of Bridgeport homepage (select "Library Resources"), or direct at http://stargazer.bridgeport.edu/Indexhtml/Library. For information on the library's book holdings, click on "Online Catalog" to access reQuest, the Connecticut database which includes Wahlstrom Library's Library of Congress-classified books. To search the over 50 databases on varied subjects in the FirstSearch online system, click on "Indexes/Abstracts" and select "FirstSearch." (A University of Bridgeport email login name and ID will be needed to access the FirstSearch databases.)

INHOUSE ACCESS

To access library books and audiovisual materials, an online public access catalog (OPAC) is available, as well as the traditional print card catalog for older materials. In addition to the author-title-subject entries in the print card catalog, the OPAC allows for searching using combinations and keywords.

The Database Search Room, adjacent to the Reference Department on the first floor, provides Internet access for research purposes. Both stand-alone and networked computers in this Room provide end-user access to many CD/ROM and online databases, including Lexis/Nexis, FirstSearch, ERIC, Medline, Moody's Company Data, and reQuest. Resources not available inhouse may be acquired via the interlibrary loan and document delivery services at the Reference Desk.

Collections

BOOKS AND AUDIOVISUAL MATERIALS

The first floor houses the Reference Collection, as well as the Bibliography, Video, Music CDs, Popular (leisure reading), and Reserve Collections. The Reserve Collection, which is located in the Circulation Department, consists of materials placed on permanent or semester reserve and can be accessed by asking for assistance at the Circulation Desk.

The third and fourth floors are devoted to the major circulating subject collections. The office of the Health Sciences Librarian is located on the third floor adjacent to the Chiropractic circulating collection. The new Southwestern Connecticut Poetry Reading Room, which includes first and signed editions and rare items, is also located on this floor. The Education Curriculum Center and the Juvenile Collection, which support the teacher certification program, are located on the fourth floor, along with the circulating professional education books.

PERIODICALS

Periodicals Services encompasses the entire second floor of the Library and includes journals/magazines, indexes/abstracts/national and international newspapers, microforms, and a vertical file with informative newsletters and bulletins on many subjects. Current periodicals are shelved in a closed area, but patrons may access this "Current Room" to retrieve specific journals or to browse through journals in their area of interest by leaving an ID. A separate card catalog on this floor identifies all journals held, giving format (print or microform) and holdings information. The entire ERIC educational documents collection on microfiche is housed in the Microforms Area, a section of Periodicals Services. Bound and unbound back issues of journals and printed indexes/abstracts are shelved in the "Open Stacks" area of this floor.

SPECIAL COLLECTIONS/ AUDIOVISUAL

Multimedia Floor The fifth floor is dedicated to audiovisual/multimedia facilties. Located here are rooms for viewing videos, laser discs, x-rays, and anatomical models, and for listening to music CDs and audiotapes.

A Special Collections Room, which includes University archives and rare books, is also located on the fifth floor.

Student Development

Dean: Janet Merritt
John J. Cox Student Center
244 University Ave., Bridgeport, CT 06601
(203) 576-4395
E-mail Merritt@cse.bridgeport.edu

The University is committed to the overall welfare of every student. Student Development professionals assist and advise students in their educational development, their orientation to campus, their physical, mental and spiritual health, their governance and extracurricular activities and their residence life. Students at the University of Bridgeport are expected to assume responsibility for making their own decisions and forming their own judgments concerning personal, social and academic activities. However, the University retains high expectations of appropriate behavior.

When the University deems it necessary it reserves the right to notify the parent or guardian to whom a student is financially dependent regarding the health, academic or disciplinary status of the student. (Dependency is defined by Section 152 of the 1954 Internal Revenue Code).

The Student Development Division of the University of Bridgeport provides an environment conducive to the building of a vibrant academic community in which each individual and the various groups of individuals are supported in their efforts to develop their intellectual abilities, personal talents, and social skills.

Goals

While intellectual development and academic achievement in the classroom are its primary focus, the University also chooses to provide opportunities for growth and development in all aspects of campus life.

Students are challenged to reach specific developmental goals in six areas:

- *Academic*
  Students will be prepared for a lifetime of learning by developing oral and written skills, mastering an academic area, learning to think critically and being computer literate.
- *Personal*
  Students will understand who they are by managing their emotions, developing their own values and principles, knowing how to make decisions and solve problems and taking personal responsibility.
- *Communal*
  Students will learn how to live in a community by respecting the environment, serving the community, learning to lead and sharing pride in their University.
- *Cultural*
  Students will appreciate individual and cultural differences by being politically and culturally aware, interacting with people who are different from themselves and communicating in a changing and technologically advancing world.
- *Career*
  Students will prepare to take their place in a changing workplace by understanding their own strengths, setting career goals, developing strong work habits and using resources effectively.
- *Health*
  Students will know how to stay healthy and live well by enjoying recreation and leisure, managing stress, understanding the consequences of drug use and abuse and accepting responsibility for their health.

The Student Development staff works to create the environment within which students will have the opportunity to reach these goals.

Services

ADVISING

All students are assigned a faculty advisor through their departments and colleges. It is incumbent upon the student to meet with his/her advisor on a regular basis.

CAREER RESOURCE CENTER

The Career Resource Center offers valuable resources to all students and alumni seeking assistance in the process of career exploration.

Practical assistance with resume writing and interviewing skills development is available. A career resource library provides information about current full-time and part-time job listings open to enrolled students, those seeking employment after graduation, and alumni. Also available are reference volumes, periodicals, company brochures and information for students to utilize in their career preparation and research.

Recruitment for graduating students occurs from October through April when representatives from businesses, corporations, health facilities and other organizations schedule interviews on campus; information is posted throughout the campus. A Career Fair is held annually in the Fall and a Job Fair annually in the Spring.

ORIENTATION

New student orientation programs are designed to introduce students to the University of Bridgeport community. The orientation program begins a few days prior to the start of classes. This gives incoming students the opportunity to get settled in their new environment and to become familiar with their academic program. Formal and informal social and informational sessions provide students with the opportunity not only to learn about the University's policies, but to meet and socialize with other students. All new students are expected to attend.

STUDENT ACTIVITIES AND PROGRAMS

Extracurricular activities are an important part of the college experience. Students plan programs and activities that are of interest to them. The professional staff works with individual students as well as with the various organizations and clubs to meet the intellectual, social, and cultural needs of the students. There are many opportunities for students to participate in the planning of these activities.

ORGANIZATIONS AND CLUBS

The University supports a wide range of student clubs, organizations and special interest groups that expand and cultivate the academic, professional and cultural interests of students. Each group develops, within broad University guidelines,

its own policies and programs with the assistance of a faculty or staff advisor.

The following lists the registered 1996/97 clubs, organizations and associations:

Accounting and Finance Society, Baking Club, Barnum Hall Government; Black Student Alliance; Bridgeport's Best Coffee; Caribbean Club; C.A.R.P.; Chinese Student Association; Commuter Student Association; Fashion Merchandising Club; Freshman Class Government; The Gate; Indian Student Club; Industrial Design Society; International Relations Club; Japanese Students Association; Jewish Student Organization-Hillel; JKA Karate Club; Junior Class Government; Korean Student Association; Latino Student Association; Malaysian Student Association; Moslem Student Prayer Group; Mu Psi Epsilon Honor Society-Music; Omega Alpha Society; Omega Phi Alpha National Service Sorority; Phi Alpha Theta National Honor Society-History; Phi Delta Epsilon Honor Society-Journalism; Pi Psi Omega Fraternity; Pre-Chiropractic Club; Protestant Fellowship; Religious Youth Services; Residence Hall Association; S.C.U.B.A.; The Scribe; Sigma Delta Chi Professional; Sigma Tau Delta Fraternity; Thai Student Association; SADHA Dental Hygienists; Senior Class Government; Sophomore Class Government; Student Center Board of Directors; Student Congress; U.B. Christian Knights; UB Engineering Society; WUBN Radio; Unified Martial Arts Association of U.B.; Vietnamese Student Association.

FRATERNAL ORGANIZATIONS

Fraternities and sororities contribute to University social life and offer opportunities for the development of leadership skills and provide volunteer service to the campus and to the greater Bridgeport community.

VOLUNTEER OPPORTUNITIES

UB students are involved in a wide range of volunteer activities. They assist with admissions and orientation programs and participate in volunteer opportunities in the community. UB students tutor local elementary and high school students, sponsor parties and dances for area youngsters, visit the elderly, sponsor clothing drives and organize fundraisers for local charities. UB students are encouraged to volunteer time to different campus and community organizations and projects.

FACILITIES

Although opportunities for social activities occur everywhere on campus, the following facilities are used for student-related social, recreational, and organizational activity.

John J. Cox Student Center is the hub of student on-campus activity. The Social Room, the Campus Information Center, the Commuter Student Lounge, the Common Room, meeting rooms, a food court, lounge areas, game room and the Bowling Alley are all part of the Center. Offices for major campus organizations such as Student Congress, the University newspaper, and others are also housed in this facility. Programming in the Center ranges from dance parties, concerts, semi-formals and special dinners to movies, lectures and fashion shows. Conveniently located in the Student Center are several offices of the Student Development Division.

Carstensen Hall gives special opportunities to students who are seeking to maintain and enrich their spiritual life on campus. Carstensen Hall houses the Interfaith Center. Adjacent to the Student Center, it provides a quiet, warm atmosphere in which both worship and fellowship are part of every day.

Wheeler Recreation Center is a complete recreation physical fitness facility with a 25 meter, 6 lane pool; four racquetball courts; four multi-purpose indoor courts for tennis, volleyball, and basketball; a free-weight room, a 16 station universal gym room, saunas, steam bath and indoor track. Students use the Center for personal recreation, intramural team events, organized group events, some physical education courses and non-credit courses in aerobics, slimnastics, self-defense, private sports lessons and the like.

MEDIA

The University supports a student news publication, *The Scribe; The Alumni Newsletter;* a University publication, *UB Today;* and, a monthly international publication, *The International Exchange.* The residence halls, as well as the staff of the Student Development Division, publish monthly newsletters.

PART-TIME STUDENT SERVICES

Part-time students may use all of the services available to full-time students. Admission staff members provide entry counseling to determine if students are "traditional" or "non-traditional" and make appropriate assignments to the colleges.

Traditional students are those enrolled in a regular program on the Bridgeport campus in the usual University manner in terms of scheduling and location. Non-traditional students are those enrolled in adult degree programs and those attending class at UB-Stamford Center or any of our other branch campuses.

Since many part-time students are employed or have responsibilities at home, schedules have been arranged so that most students come to class two nights per week. Some courses are offered on Mondays and Wednesdays and others on Tuesdays and Thursdays, while others are arranged in special scheduling formats. Information describing new student orientation, campus resources, workshops, student publications, social and cultural activities may be obtained from the Student Development Office, Student Center, 576-4395.

RELIGIOUS LIFE

Although the University of Bridgeport is non-sectarian according to its charter, it does not ignore the ethical and moral ideals common to all religions.

The University calendar does not reflect observance of religious holidays but University policy holds that all students are free to observe their respective holidays without prejudice.

Ministers and/or advisors are available to members of many religious groups on campus. A sanctuary and a Moslem Prayer Room are also available. Facilities are available for

meditation, quiet study, recreation, group meetings, dinners, and religious services.

STUDENT JUDICIAL AFFAIRS

The mission of the Judical Affairs Office is to articulate and oversee the consistent implementation and enforcement of the University's code of conduct.

The goals are:

- to educate the University community regarding the code of conduct expected of its members;
- to clearly articulate, implement and enforce the code of conduct and standards of behavior; to educate the University community as to the consequences for violating this code of conduct;
- to adjudicate each case expeditiously and with regard to due process; and
- to train those who will assist the Judicial Affairs Officer as well as those who will serve on the disciplinary council.

HEALTH CENTER

The mission of the Health Center is to provide students with an ongoing, integrated and comprehensive health service.

The goals of the Heath Center are:

- to provide educational programs;
- to address the acute health care needs of students;
- to assist students in their personal goals for physical health;
- to provide outreach to faculty, staff and students;
- to maintain resource and referral information; and
- to provide opportunity for physical evaluation.

The Center does not seek to replace family physician care but rather to supplement that care during the years when the student is attending the University, often at some distance from home. Care includes dispensing of non-prescription and prescription drugs, first aid and treatment of minor illnesses and medical referral for situations which require more extensive medical care than the Center provides. The Health Center assists with arrangements for hospital admission.

A pre-entrance physical examination by a physician must be completed and proof of communicable disease immunization must be provided by all students prior to college entrance. This serves as a basis for any health decision made for each student.

Connecticut Public Act No. 89-90 requires all new students and returning students born after December 31, 1956 to provide proof of immunization against measles and rubella. You are required to provide proof of two doses of measles vaccine:

MEASLES (RUBEOLA)

1. First dose on or after 12 months of age. and given in or after 1969.
2. Second dose given on or after January 1, 1980. (History of having had disease is not acceptable documentation of immunity.)
3. Laboratory evidence (blood test) of immunity is acceptable in lieu of administration of vaccine.

RUBELLA (GERMAN MEASLES)

1. Immunization with rubella vaccine after one year of age.
2. History of having had disease is not acceptable documentation of immunity.
3. Laboratory evidence (blood test) of immunity is acceptable in lieu of administration of vaccine.

Students registering at the University of Bridgeport will be required to bring proof of immunization for measles and rubella prior to registration. **Any student not showing the necessary proof of immunization will not be able to register.**

Vaccines are available in the Health Center to students who are currently registered at the University. A fee of $15.00 is charged for each vaccine.

The Health Center provides clinic, counseling and emergency first aid. It is staffed by University physicians and nurses. It is open 8:30 a.m. to 4:30 p.m., five days a week. The Health Center meets all applicable local, state, and federal health regulations.

Every full-time student is required to carry health insurance either through UB or through their family coverage. The student will be billed for this insurance unless he/she presents to the Bursar proof of other comparable health insurance coverage and a waiver. UB accident insurance is mandatory of all full-time students.

DRUG ABUSE PREVENTION STANDARDS AND RESOURCES

The University of Bridgeport endorses and is strongly committed to the standards set by the Drug-Free Schools and Communities Act of 1989. The unlawful possession, use, or distribution of illicit drugs and alcohol by students or employees on University property or as part of any University activity is prohibited. Policies related to controlled substances and alcoholic beverages may be found in the student handbook, *The Key to U.B.*

Resources at the University where further information may be obtained about substance abuse and its treatment include the University Health Center and the University Counseling Center.

COUNSELING SERVICES

Counseling Services offers professional services to help students overcome problems, past and present, and gain self-understanding and direction. These services include individual and group short-term counseling/therapy, psycho-educational programs, crisis intervention, and consultation and referral to private/community resources.

Workshops, seminars and other outreach activities are offered to assist students to develop coping strategies to respond to personal, academic and life issues.

Counseling Services are without charge to the student and professional confidentiality is assured.

INTERNATIONAL AFFAIRS

Students from approximately 60 countries are cordially received by members of the

University family and by residents of the local community. A special orientation program for new students is held each semester prior to the beginning of classes. The International Affairs Office works closely with international students to help solve their unique problems involving immigration requirements, living arrangements, and other non-academic matters.

International students are assigned residence hall rooms on the same basis as American students to ensure the opportunity to interact with American students. Special twelve month housing is available. The International Relations Club provides an opportunity to learn, share and appreciate, in an enjoyable setting, the many different cultures on campus.

SPECIAL SERVICES

(Individuals with Disabilities)

Students who have a disability which may affect their campus activities or academic studies are urged to contact Special Services at the Counseling Service Center for information and referral services.

THE WOMEN'S CENTER

The Women's Center is a place for all women, and men, of every race, ethnicity, age, ability, class, sexual orientation and religion to gather together to explore and learn about issues that impact women. Activities, resources and programs foster an atmosphere that empowers women.

A reading room, meeting area and lounge are available for relaxation, discussion and study.

Residential Life

The University recognizes the important contribution that life in the residence hall can make to a student's total educational experience. Each hall is staffed by at least one Resident Director and Resident Advisors. Their efforts are coordinated by Student Development administrators through the Office of Residential Life. Staff members work to develop an environment which supports student efforts to achieve the Student Development Goals. Residence hall staff have the responsibility of enforcing University policies, procedures and regulations relating to communal living and student life, assisting students with problems, questions and special needs; and promoting, with the active cooperation of residents, an environment that supports academic endeavors.

LIVING ON CAMPUS

The University offers a variety of housing options. Students have the choice of a single, double, double-as-single, triple or triple-as-a-double room, each with a different price structure. Room preference assignments are subject to availability. Efforts are made to match new roommates by smoking/non-smoking preference.Students may seek a change in roommates after two weeks of residency. Because the University is not responsible for theft or damage to personal property, students are advised to obtain renter's insurance, or ensure coverage under their parents' homeowner's policy. All halls have twenty-four hour security guards.

RESIDENCE AND MEAL PLAN REQUIREMENTS

All students who are full-time undergraduates are required to live in University residence halls unless they meet one or more of the following criteria:

1. Those who have attained the age of 21 by the first day of classes.
2. Those who have accumulated 57 academic credits (including transfer credits) by the first day of classes.
3. Those who are living at home with parents, a spouse or other close relatives within a 50 mile driving distance of the University.

Exceptions to this policy must be requested from the Office of Residential Life in writing and approved by the Director of Residential Life by the first day of classes. All resident students who are required to live in the residence halls are also required to be on the meal plan unless a waiver is granted. Students with special dietary needs will be accommodated after consultation with the University's food service dietitian.

The Residence Hall and Meal contracts, once signed by the student, are binding for the academic year (not the semester).

Under the direction of a professional dietitian, food service is provided in our Dining Hall. Meals are served three times daily, with the exception of Saturday and Sunday when two meals are served. The Dining Hall is closed during vacation periods as scheduled in the University calendar. Kosher meals are available through the Dining Hall, upon request.

Winter and summer housing is available on a limited basis. Additional requirements may apply.

Sports

Students have an opportunity to be involved in a wide variety of sports at every level of competency from intercollegiate competition to intramurals, leisure activity, and learning through lessons and coursework.

FACILITIES

The Harvey Hubbell Gymnasium seating 2,000 spectators is the center for intercollegiate sports programs at the University. Complementing the intercollegiate facility is the Wheeler Recreation Center (described under Student Activities). Students may use softball, baseball, soccer and field-hockey fields in Seaside Park, which is adjacent to the campus.

INTERCOLLEGIATE ATHLETICS

MEN

The University fields men's teams competing on an intercollegiate level in soccer, basketball, baseball and cross country. Among the colleges and universities against which these teams compete are: American International, Assumption College, Keene State, Merrimack College, Bentley, Southern Connecticut State University and Springfield College.

The University's Intercollegiate Division II athletic program participates actively in the Eastern College Athletic Conference, the New England Collegiate Conference,

the National Collegiate Athletic Association, and the New England Intercollegiate Soccer League.

The University's men's basketball team captured the NCAA Division II Regional Championship in 1990, 1991 and 1992. They were National Runnerups in 1991 and 1992.

WOMEN

The women's intercollegiate program includes varsity teams in soccer, basketball, gymnastics, softball and cross country. Among the colleges and universities against which the women compete are Southern Connecticut State University, Central Connecticut State University, Springfield College, Adelphi University, Assumption College and Merrimack College.

The University's intercollegiate athletic program for women actively participates in the Eastern Collegiate Athletic Conference, the New England Collegiate Conference and the National Collegiate Athletic Association.

The women's softball team won the ECAC Championship in 1992, and the women's basketball team has won two of the last three N.E.C.C. Championships and has qualified for three consecutive N.C.A.A. tournament berths.

INTRAMURALS

A program of men's, women's and co-educational intramurals is offered through the Wheeler Recreation Center. Scheduled from late September through April, offerings include softball, tennis, racquetball, touch football, soccer, floor hockey and basketball.

LIFETIME SPORTS ACTIVITIES/RECREATION

A variety of opportunities to learn and enjoy leisure sports through the Lifetime Sports Program offered through the Wheeler Recreation Center also includes American National Red Cross courses in swimming, first aid and CPR, as well as courses in scuba, aerobics, slimnastics, supervised physical fitness, badminton, handball, and self-defense.

Student Conduct and General Standards

Students at the University of Bridgeport are expected to respect the rights of others, exercise responsible judgment and follow high standards of personal conduct. Students are expected to involve themselves directly in activities that promote the welfare of the University and society and to behave with courtesy and restraint toward fellow students and University staff. The University fosters a multicultural, international environment and does not condone or tolerate discrimination on the basis of gender, sexual orientation, race, color, religion, age, national or ethnic origin, creed, political affiliation, or handicap. The University strives to create an atmosphere of mutual trust between individuals, thereby promoting self-discipline and decreasing the need for external control.

At the same time, the University maintains concern about the behavior of its students both on and off campus. In the maintenance of its academic, social and health standards, the University reserves the right to be the sole judge as to whether a student should be removed from residence life, receive fines or sanctions, be suspended or expelled or granted a leave of absence. A student suspended or expelled from the University is responsible for the full payment of his/her financial charges for the semester.

Students are expected to conform to all governing regulations of the University as outlined in the *Key to UB Student Handbook*, the *Catalog* and all official notifications of policy. A student will be subject to University disciplinary procedures if his/her on or off-campus behavior results in violations of these governing regulations or civil law.

All forms of disciplinary action, notification of charges, disciplinary procedures, appeals and a review of actions that may lead to disciplinary procedures are identified and described in the *Key to UB Student Handbook*, sections on Judicial Affairs, the Constitution of the University of Bridgeport's Disciplinary Council, and Residence Halls Guidelines. It is the responsibility of the student to familiarize him/herself with all University and Residence Hall codes, regulations and policies.

Admissions

Dean of Admissions and Financial Aid:
Suzanne Dale Wilcox

Office of Admissions
Wahlstrom Library, Sixth Floor
126 Park Avenue, Bridgeport, CT 06601
203-576-4552 • 1-800-EXCEL-UB
Fax: 203-576-4941
E-mail: admit@cse.bridgeport.edu
Internet Home Page:
http://www.bridgeport.edu

Admissions Policy

All University of Bridgeport applications are reviewed and evaluated on an individual basis. The University of Bridgeport admits qualified students regardless of race, color, sex, religion, age, national and ethnic origins or handicap. Applications are accepted and reviewed on a rolling basis, throughout the year.

Application

An application may be obtained from the Office of Admissions, University of Bridgeport, 126 Park Avenue, Bridgeport, Connecticut 06601. A non-refundable fee of $35.00 ($50.00 for Doctoral candidates and International students, $75.00 for the College of Chiropractic) should accompany the application. Checks should be made payable to "The University of Bridgeport." For further information, please call (203) 576-4552 or toll free 1-800-EXCEL-UB.

Undergraduate Applicants

FRESHMAN STUDENTS

SECONDARY SCHOOL PREPARATION

The Admissions Committee places emphasis on the quality of the preparatory work of each applicant.

An applicant should be a graduate of a regionally accredited secondary school and should present sixteen acceptable units of academic work, including four units in English, three units in Mathematics, two units in a lab science, two units in the social sciences and a minimum of five electives. An applicant who has not satisfied the distribution of college requirements, but has presented convincing evidence of the quality of his/her high school work, may be admitted with the provision that the deficiencies must be removed before being granted major status in their respective academic program.

Students are admitted for both the Fall and Spring terms. Should a student be unable to enter the University during the term for which admission is granted, the offer of acceptance will remain open for one calendar year. Students must notify the Office of Admissions if it is their intention to defer their enrollment.

ENTRANCE TESTS

All applicants for admission as full-time freshmen are required to take the Scholastic Aptitude Test (SAT) or American College Testing Program Exam (ACT). Applicants should have their scores sent directly to the Office of Admissions.

Applicants for the Scholastic Aptitude Test may obtain full information from the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540 or from their high school guidance counselor. The College Board college code number for the University of Bridgeport is 3914.

ACT information may be obtained from the American College Testing Program, P.O. Box 168, Iowa City, Iowa 52240 or from their high school guidance counselor. The ACT college code number for the University of Bridgeport is 0602.

TRANSFER STUDENTS

An applicant who has attempted 12 or more semester hours at a regionally accredited post-secondary institution is considered a transfer applicant. The Admissions Staff will evaluate transfer credit and core credit. Equivalencies are judged in the context of the core curriculum previous to the one currently in place. Requests for core credit based on a course meeting the "spirit" of the core will be referred to the chair of the core commission for approval.

TRANSFER CANDIDATES MUST SUBMIT:

A. An application for admission.

B. An official copy of all college transcripts from each post-secondary institution previously attended. An applicant who fails to indicate attendance at a previous institution at the time of application may forfeit eligibility for transfer credit.

C. An applicant must have earned at least a "C" average (2.0 quality point average) for all work attempted and be in good academic standing at the previously attended institution to be considered for regular admission.

The status of any applicant admitted before all final, official transcripts are received will be reevaluated upon receipt of the final transcript.

Transfer applicants are urged to apply well in advance of the opening date of the term in which they plan to enter. This will enable the student to receive a timely evaluation of their transfer credit and appropriate academic advisement and program planning.

Students are required to complete their last thirty semester hours at the University of Bridgeport and meet course requirements as described in each program to be eligible for a degree. A maximum of 66 credits may be awarded from two-year colleges and 90 credits from accredited four-year institutions. Transfer credit is awarded on a course by course basis.

Special Instructions for Specific Majors

Applicants are encouraged to call the appropriate department for information and/or to schedule an appointment. If difficulties are encountered, applicants should call the Office of Admissions at (203) 576-4552 for assistance.

ART AND DESIGN

A portfolio review is required of all candidates in design. The portfolio plays an important role in the admission process and may offset a transcript or SAT scores which fall below the established guidelines. The student may personally submit a portfolio to the school or send the portfolio and/or slides through the mail.

Applicants should call the Department at (203) 576-4436 to schedule an appointment or make arrangements to submit the portfolio by mail. The University of Bridgeport participates in regional portfolio days sponsored by the National Association of Schools of Art and Design (NASAD) and portfolio reviews may be completed at the NASAD program.

LEGAL ASSISTANT PROGRAM

A personal interview is strongly recommended for all applicants due to the special nature of the program. An appointment may be scheduled by calling (203) 576-4641.The interview, as well as the high school transcript and SAT scores, play a role in the admission process. Applicants who meet some but not all of the admissions guidelines may be reviewed with the program chairperson for final decision. Applicants with a Bachelor's Degree will receive a maximum of 30 transfer credits as evaluated and will be expected to complete the degree requirements as well as meeting the core curriculum.

DENTAL HYGIENE

All applicants are required to meet with the division director (203) 576-4138 who reviews applications before a final decision is made. College Prep Biology and Chemistry with lab and two years of high school Math are academic prerequisites. Students without science prerequisites may begin in a pre-clinic curriculum upon advisement of the division director. Clinical students must begin in the fall semester of an academic year and attend full time.

MUSIC

Admission to the major in Music (Performance, Jazz Studies) requires an audition. Applicants should call the Department at (203) 576-4404 to schedule an appointment.

HONORS COLLEGE

The University of Bridgeport offers an Honors College Program that is a rigorous, intellectually demanding academic program for students who qualify for intensive courses.

Freshman applicants must meet the following criteria:

Combined SAT: 1180, top 20% of class, 500 word essay on career and intellectual interests.

Transfer applicants must meet the following criteria:

Top 10% of class, Grade Point Average: 3.0, 500 word essay on career and intellectual interests.

STUDENT ATHLETES

The University of Bridgeport offers a full program of NCAA Division II intercollegiate sports, including basketball, baseball, cross-country and soccer for men, and basketball, softball, crosscountry, gymnastics and soccer for women. Athletic scholarships are available. All students who wish to participate in intercollegiate athletics are required to register with the NCAA Initial-Eligibility Clearinghouse. For more information and a Clearinghouse registration form, please contact your high school guidance office.

Undergraduate Testing Information

SCHOLASTIC APTITUDE TEST (SAT)

Administered by the American College Testing Program. Scored on a scale of 200-800 for each part: verbal and math.

SAT Program
The College Board
P.O. Box 6200
Princeton, NJ 08541-6200
(609) 771-7600

AMERICAN COLLEGE TESTING (ACT)

Administered by the American College Testing Program. Scored on a scale of 1 - 33. Scores for English, Math, Reading, Science Reasoning, and Composite.

American College Testing
P.O. Box 168
Iowa City, Iowa 52243
(319) 337-1360

TEST OF ENGLISH AS A FOREIGN LANGUAGE (TOEFL)

Administered by Educational Testing Service. Scored on a scale of 200 - 677.

TOEFL/TSE Services
P.O. Box 6151
Princeton, NJ 08541-6151, USA
(609) 771-7100

Undergraduate and Graduate International Applicants

The University of Bridgeport enrolls students from more than 60 nations. To be considered for admission, students must complete the International Student Application which can be obtained by writing the Office of Admissions, University of Bridgeport, 126 Park Ave., Bridgeport, CT 06601, U.S.A., by fax at 203-576-4941 or on-line at http://www.bridgeport.edu.

Official copies of original transcripts of all academic work must be submitted along with the official, literal, word for word, English translations. In addition, students are required to demonstrate that sufficient funds are available to meet the cost of tuition, fees and living expenses. The Financial Statement is included in the International Student Application.

English Language Requirements

Those whose native language is not English are required to show English language proficiency in one of the following ways:

1. By achieving an acceptable TOEFL (Test of English as a Second Language) score of:
   a. 500 or more for undergraduate students
   b. 550 or more for graduate students
   c. 575 for more for graduate business students
2. By achieving an acceptable score on the test of English language proficiency administered by the University;
3. By successfully completing (at level 12) the intensive program of English as a Second Language offered by the University's English Language Institute (ELI);

4. By successfully completing one semester of college English at a regionally accredited American university with a grade of "C" or better;
5. By successful completion of the S.A.T. verbal exam with a score of 400 or above;
6. By successful completion of the A.C.T. English exam with a score of 19 or above;
7. By successful completion of the Michigan Test of English as a Foreign Language with a score of 85 or above;
8. By successful completion of the Prueba de Aptitud Academica (P.A.A.) with a score of 500 or above;
9. By successful completion of English Language Service (E.L.S.) Level 109.

Information on the intensive program of English as a Second Language (Level 12) offered by the University's English Language Institute may be obtained by contacting: English Language Institute, Mandeville Hall, University of Bridgeport, Bridgeport, CT 06601, U.S.A.; Telephone: (203) 576-4860; Fax: (203) 576-4861.

INTERNATIONAL CANDIDATES MUST SUBMIT:

A. A completed admissions Application for International Students.

B. An official transcript or a certified copy of all previous academic work along with a certified, literal English translation.

C. Documentation that sufficient funding is available to meet the University's tuition and fees and living expenses. The Financial Statement is included in the Application for International Students.

Graduate Applicants

Applicants to the University of Bridgeport are required to have an undergraduate degree from an accredited institution or from a recognized international university. Official transcripts of all previous course work should be sent directly to the Office of Admissions.

Admission decisions are based primarily on an applicant's undergraduate record. A prospective student who is currently completing undergraduate study should submit an official transcript complete to the date of application. In most cases, an admission decision will be made on the basis of a partial transcript, contingent upon completion of the baccalaureate degree. Registration will not be permitted until a final, official transcript is submitted to the Office of Admissions.

Generally, students may be admitted for any term — fall, spring or summer. Should a student be unable to enter the university during the term for which admission is granted, the offer of acceptance will remain open for one calendar year. After one year, a new application will be required.

TRANSFER CREDITS

The School Director with the Dean's approval, may allow up to six semester hours (eight hours in the case of laboratory courses) of graduate transfer credit from an accredited college. The courses should have been completed recently with a grade of "B" or better and be comparable to UB's Graduate courses.

Specific colleges of the university and certain programs have additional requirements for admission, details of which are included in the individual program listing in this catalog.

Graduate Testing Information

GRADUATE MANAGEMENT ADMISSION TEST (GMAT)

Administered by the Graduate Management Admissions Council. Scored on a scale of 0 - 60. Scores for verbal, quantitative and composite.

Educational Testing Service
P. O. Box 6103
Princeton, NJ 08541-6103
(609) 771-7330

GRADUATE RECORD EXAMINATION (GRE)

Administered by the Educational Testing Service. Scored on a scale of 200 - 800.

General GRE is composed of questions aimed at measuring aptitude and not specific subject knowledge.

Subject GRE's are designed to measure competency in a specific subject area.

Educational Testing Service
P. O. Box 6000
Princeton, NJ 08541-6000
(609) 771-7670

MILLER ANALOGIES TEST (MAT)

Administered through a network of controlled testing centers licensed by the Psychological Corporation.

The MAT is a high-level mental ability test requiring the solution of problems stated as analogies. It consists of 100 partial analogies that are to be completed in 50 minutes. Tests are scored in raw format and in percentiles based on the intended major and on the general population of MAT examinees.

Miller Analogies Test
The Psychological Corporation
555 Academic Court
San Antonio, Texas 78204-3956

TEST OF ENGLISH AS A FOREIGN LANGUAGE (TOEFL)

Administered by Educational Testing Service. Scored on a scale of 200 - 677.

TOEFL/TSE
P. O. Box 6151
Princeton, NJ 08541-6151, U.S.A.
(609) 771-7100

Special Admission Considerations

SPECIAL STUDENTS

A Special Student is permitted to take courses for credit on a part-time basis, as a non-degree candidate, as long as the student has met the prerequisites for the course.

A Special Student may become a matriculated student if he or she meets the appropriate requirements for admission.

However, a Special Student is subject to any changes in graduation requirements instituted prior to actual matriculation. Candidates for matriculation may attend as Special Students up to the completion of 12 credits. **A maximum of 12 credits taken as a non-matriculating student may be applied to a student's requirements for graduation, with program approval.**

AUDITING

Each semester, some courses may be taken on a non-credit basis at a reduced tuition. Permission to enter these classes is based on available space. Those classes which are open to non-credit students are noted in the bulletin of classes printed each semester.

Interviews, Information Sessions and Campus Tours

It is strongly recommended that all applicants have an interview. We encourage applicants and their parents to meet with a member of the Admissions staff or their respective academic department to discuss academic and career goals as well as the particular concerns of admission and financial assistance. The Admissions Office is open Monday through Thursday from 8:30 a.m. - 6:00 p.m., Friday from 8:30 a.m. - 4:30 p.m. and Saturday by appointment. Tours of the campus are scheduled at 10:00 a.m. and 2:00 p.m. Monday through Friday and by appointment on Saturday. The Office of Admissions is located on the sixth floor, Wahlstrom Library, 126 Park Avenue, Bridgeport, CT, 06601.

Personal interviews and campus visits may be scheduled at alternative times by calling the Office of Admissions.

For more information about interviews, open houses and campus tours please contact the Office of Admissions, at (203) 576-4552 or toll-free 1-800-EXCEL-UB.

Scholarships

The University offers academic scholarships to many students who have a successful high school or two-year college record. Full scholarships, called Academic Excellence and Leadership Scholarships, are offered to high achieving students. A range of these scholarships reward various levels of previous achievement: Academic Scholarships, Academic Grant and Challenge Grant.

Cooperative Education and Internships

Co-op Director: Tracy Rigia
END Hall, 1-B
(203) 576-4098

Cooperative Education

The University of Bridgeport offers an extensive voluntary cooperative education program, allowing students to combine classroom study with work experience in their chosen profession. Cooperative Education provides a practical application of academic studies plus opportunities to learn material that cannot be taught in the classroom. Cooperative Education offers the additional bonus of providing paid work experience that can contribute to paying college tuition.

Co-op students are able to graduate in less than five years with a Bachelor's degree while gaining up to two years of valuable professional experience. Associate degree students or transfer students who enter UB as juniors, graduate in approximately two and one-half years with one year of professional experience.

CO-OP WORK ASSIGNMENTS

Work assignments are located by the University Co-op Director and faculty in the schools, and are related as closely as possible to the student's course of study and career goals.

The large majority of Co-op jobs are located within 40 miles of the University. Some students locate jobs near their homes outside the normal Co-op placement area, thus enabling them to increase their net earnings from Co-op salaries. Those students who live and work in the University area may take one or two evening courses during the Co-op work term in order to accelerate the completion of their studies. It is also possible to transfer evening course credits from other colleges if the work assignment is outside the University of Bridgeport commuting area.

STUDENT SALARIES

Students are placed in regular jobs and normally are paid for their services by the cooperating employer. They perform under actual working conditions and are advanced on the basis of merit.

Guarantees concerning job placement and pay cannot be offered. However, between the end of the freshman year and graduation, the typical gross Co-op salary can represent a substantial portion of the total cost of a student's education.

CREDITS

Academic credit for Co-op work experience is authorized by the dean and faculty of each of the individual schools having Co-op programs. Specific details can be obtained from the Co-op Director or faculty in the particular school in which the student is enrolled.

ELIGIBILITY

The Co-op Program is open to all full-time students demonstrating their academic ability. Freshmen are evaluated on the basis of their first semester in attendance at UB.

Cooperative Education job openings for international students are limited. However, Co-op work assignments are possible for the student who has a thorough command of oral and written English. Each applicant will be evaluated individually.

APPLICATION AND REGISTRATION PROCEDURES

Applications are accepted from full-time students in attendance at the University of Bridgeport. The student must submit a co-op application, a transcript, a resume, and documentation certifying his or her eligibility to work. Additional documents may be required by the International Student Office for students holding F-1 and J-1 visas.

Students must register and pay the appropriate co-op credit fee each work term. Students electing to receive no academic credit for their co-op work experience will be charged a co-op fee of $250 every work term. Credit co-op students earn one academic credit per work term. Under no circumstances will a co-op employer be asked to pay a credit fee or a co-op fee.

BENEFITS FOR THE CO-OP STUDENT

- Theory and practice are more closely related. Motivation is increased as studies become more meaningful.
- Work experience develops maturity, a sense of responsibility and self-confidence.
- Co-op earnings can help pay for an education and give the student a sense of being self-supporting.
- Work experience helps to develop understanding of other people and greater skills in human relations.
- Job opportunities help to test career objectives, thus confirming the original goals or indicating a change at an early time.
- A business contact may be made that can lead to permanent employment or that can be used for reference to other employers.

The professional experience that the Co-op graduate can offer any prospective employer gives him or her an advantage in the job market. This on-the-job background often enables the Co-op graduate to start at a higher level job and with higher pay than other students.

INTERNSHIPS

Internships for students to pursue advanced studies through placement and work activities in the private or public sector external to the University are available to highly qualified students. Arrangements for internships normally are made with the department internship director, the student's faculty advisor and the school director.

Academic Regulations and Procedures

GENERAL INFORMATION

The Advising System

The University provides academic and personal services to support each student's effort to gain the best possible undergraduate education. Selecting a course of study, choosing a major, and deciding upon a career are crucial decisions for every student. The Advising System functions to assist students in designing their programs according to their individual interests and needs.

Each student is assigned a faculty advisor who is available during each semester for consultation. Faculty advisors are available for on-campus interviews and assistance in course selection. During orientation, a new student has meetings with a faculty advisor before the start of classes. An advisor for the major is assigned during the first semester. It is required that each student establish contact with his or her advisor prior to registration or initiation of program change. Professional counselors are available for assistance with non-academic concerns.

Interruption of Studies

WITHDRAWAL FROM AN UNDERGRADUATE COURSE

Students withdrawing from the University (*all* courses) must file an application for withdrawal at the Registrar's Office by the last date to withdraw from courses as published in the course bulletin. A copy of the withdrawal application will be forwarded to the appropriate College Dean or School Director's office. An exit interview with the Dean of Students is recommended for students considering voluntary withdrawal. **No student is considered officially withdrawn and no refunds of fees or deposits can be made unless the student has contacted the Registrar's Office.**

Cessation of attendance, notice to instructors or telephone calls to the University do not constitute official withdrawal.

WITHDRAWAL FROM A GRADUATE COURSE

An application for withdrawal from a graduate course other than a course in Thesis, Independent Study, or Research, or the equivalent, must be obtained from and filed with the Registrar's office. If a student officially withdraws from a course during the first 20 days of class during a semester, no grade will be reported and the course will not appear on the student's transcript. Official withdrawals from courses by graduate students after 20 class days will result in a "W" being recorded on their record; however, withdrawals of this type will only be permitted for reasons beyond the control of the student. When a student registers for a course, but ceases to attend class without filing an application for withdrawal, he/she shall be given a grade of "F" in the course unless extenuating circumstances, as determined by the instructor and Dean or Director, are evident. Consult the academic calendar for exact dates.

WITHDRAWING FROM THE UNIVERSITY

Students withdrawing from the University (*all* courses) must file an application for withdrawal at the Registrar's office by the last date to withdraw from courses as published in the course bulletin. A copy of the withdrawal application will be forwarded to the appropriate Dean's or Director's office. No student is considered officially withdrawn and no refunds of fees or deposits can be made unless the student has contacted the Registrar's office.

Cessation of attendance, notice to instructors, or telephone calls to the University do not constitute official withdrawal.

CANCELLATION

Students presently enrolled may cancel their registration or officially withdraw for the subsequent semester while completing the current one. Students may also cancel or withdraw during the summer or mid-year if they do not intend to return the following semester.

LEAVE OF ABSENCE

A student who has a commitment to return to the University may request in writing a leave of absence for not more than one academic year through the Registrar's Office, with a copy of the request sent to the appropriate senior administrator (Dean or Director). The student will be able to return at the beginning of any semester during the one year interval provided he/she is in good academic standing and provided that all College and University requirements have been met. An option for one additional year is available upon written request to the senior administrator (Dean or Director), who will subsequently advise the student of the disposition of the request. The leave of absence will be noted on the student's permanent record.

Readmission

REGULAR READMISSION

A student who officially or unofficially withdraws from the University must apply for readmission. Readmission is necessary with any break in attendance for full-time students and after a break of more than one semester for part-time students. A student who withdraws officially, or unofficially, and subsequently applies for readmission is required to meet the degree requirements and conditions current at the time of readmission. Students who have attended another accredited institution in the interim must present complete official transcripts with their application for readmission.

Applications for readmission are available from the Registrar's Office.

READMISSION IN CASES OF DISCIPLINARY EXPULSION AND SUSPENSION

Disciplinary expulsion and suspension may be incurred as a result of unacceptable conduct. This action is recorded on the permanent academic record of the student. See the *Key to U.B.* for rules, regulations and procedures for readmission.

FIVE YEAR RULE FOR UNDERGRADUATE STUDENTS

Students who interrupt their studies for a period exceeding five years must obtain written permission from the Dean of their College or Director of the School to apply previously earned credits toward their degree.

Application for Graduation

A student must have filed an application for his or her degree with the appropriate senior administrator's office by the date indicated in the University academic calendar.

Undergraduate students should consult with the faculty advisor in sufficient time so that a Graduation Check List can be completed before registration for the final term. Such consultation enables the advisor to check the student's records for deficiencies and allows some time during the last semester to rectify such deficiencies. Fulfillment of graduate requirements is the student's responsibility.

Transcripts

Students may have official transcripts mailed to other institutions, prospective employers, or other authorized agencies, by completing the transcript request form available at the Registrar's Office. Mailed requests must reach the office at least 10 days before the time the transcript is to be issued. The fee for having an official transcript mailed is $5.00 per copy. A student, in person, may obtain an unofficial copy of his transcript from the Registrar's Office for a fee of $4.00 per copy. Efforts will be made to accommodate students on a walk-in basis; however, during peak registration periods, twenty-four hours may be required for fulfillment. Each graduating student will receive one (1) free, unofficial copy of his/her transcript with his/her diploma upon graduation. A transcript will not be released until a satisfactory settlement of all financial obligations to the University has been made.

UNDERGRADUATE REGULATIONS & PROCEDURES

Classification of Students

A student who has formally applied for admission to the University and has been admitted to one of its Colleges as a degree candidate is a *matriculated* student. An applicant admitted with permission to take courses for which he or she is qualified, but not as a degree candidate, is a *special* student. *Special* students may later apply for matriculation and are subject to the same academic regulations as *matriculated* students. A student may remain a *special* student for up to 12 semester hours.

Only *matriculated* students carrying at least twelve semester hours are eligible for election to class and other offices (with the exception of the Part-time Student Council, and University Senate).

CLASS STANDING

Students are classified according to the number of college hours satisfactorily completed:

Freshman	0-30 semester hours
Sophomore	31-60 semester hours
Junior	61-90 semester hours
Senior	91 and above

THE MAJOR

Most students matriculating in programs leading to an Associate's or Bachelor's degree declare a major when they are admitted to the university.

Only courses on the 200 and 300 levels are normally applicable toward major credit. Unless otherwise specified, not more than one course numbered below 200 is acceptable for major credit. The student must earn a grade of "C-" or better in every major course. However, the student's overall quality point ratio in major courses must be at least 2.0. In some cases, departmental requirements may exceed these minimums. If a student earns a grade of "D" or "F" in a course in the major field, he or she must obtain a written statement from the department chair specifying the procedure necessary to remedy the deficiency and remain in the major.

THE MINOR

The University offers the option of selecting a second area of specialization.

Like the major, the minor was conceived to provide a unified, coherent program in a discipline or area of knowledge. While requiring a second focus for the student's intellectual interests, it enables him or her to investigate the important concepts of a specific area and to acquire a firm basis for further study.

In terms of career preparation, the minor option can complement a regular major program or it may add an entirely new dimension to the traditional curriculum.

Students who wish to pursue a minor should obtain the application in the Dean's or Director's office of the College or School in which the minor is offered.

Minors may be assigned in the following areas:

Biology
Business Administration
Computer Information Systems
Computer Science
Education
Finance
Graphic Design
Illustration
Industrial Design
Interior Design
International Business
Legal Studies
Literature & Civilization
Management & Industrial Relations
Marketing
Mass Communication
Mathematics
Social Science

UNSPECIFIED STATUS

Unspecified status is designed primarily for those students who have not yet chosen a specific field of concentration within their College. The courses which they take under these circumstances will fulfill the majority of general college requirements during the first and second year of study.

Students who have been admitted to unspecified status must follow the procedure for change of major in order to become admitted to a specific major and must declare a major by the end of the sophomore year.

CHANGE OF MAJOR

If after matriculation a student wishes to change a major, it must be initiated by the student through the office of the senior administrator of the College or School. In some cases, change of program may require a reevaluation of semester hours earned at UB or transferred from another institution. It is the student's responsibility to consult with the chair of the anticipated major department to formulate a curriculum plan for the completion of that degree.

Registration for Courses

The student must formally register for courses during the regular or early registration period. All charges for the semester are payable in full before or during registration unless the student has applied for the deferred payment through one of the outside monthly budget programs. A program of fifteen or sixteen semester hours constitutes a normal load. No student will be permitted to register for more than eighteen semester hours in any one semester without the prior written approval of the appropriate College Dean or School Director. Only students who are designated by the Office of Admissions as part-time students are eligible to register for less than 12 semester hours.

CHANGE OF REGISTRATION

All changes of registration require the prior written approval of the student's faculty advisor. Students shall refer to the published course schedule and *"Key to UB"* to determine additional approval procedures and requirements for all program changes. The student must submit all approved changes of registration, including course withdrawals, to the Office of the Registrar by the published deadlines.

CLASS ATTENDANCE

Undergraduate students are expected to attend their classes regularly. The instructor shall specify in the course syllabus at the beginning of the semester the extent to which the attendance factor will be taken into account when grades are calculated. Due allowance, however, will be made for such factors as illness, inclement weather, and severe personal or family problems.

UNIVERSAL ENGLISH

All student papers submitted to any instructor at the University must be of University standard in form, spelling, punctuation and literary organization. Instructors may refuse to read or to correct papers that are not in keeping with the standards of good English usage.

Grades and Quality Points

A semester hour is the unit by which credits are measured. A quality point is the numerical value assigned to letter grades A-F. Each grade is assigned quality points as shown below. The faculty uses the following criteria as bases for determining letter grades: "A" excellent; "B" above average; "C" average; "D" minimal pass; "F" failure; "I" or "R" incomplete; and "W" withdrawal. Letter grades may be assigned with "+" and "-" signs.

Other grades include pass-fail (earned under the University Pass/Fail Program): "S" - satisfactory completion of course requirements; and "U" - has not completed course requirements.

GRADE	QUALITY POINTS PER SEMESTER HOUR	GRADE	QUALITY POINTS PER SEMESTER HOUR
A	4.00	C	2.00
A–	3.67	C–	1.67
B+	3.33	D+	1.33
B	3.00	D	1.00
B–	2.67	D–	0.67
C+	2.33		

The cumulative quality point ratio (QPR) is determined by dividing the number of semester hours attempted into the number of quality points earned. Non-credit courses and grades of pass in pass/fail courses are exempted from the computation of the quality point ratio. Incomplete ("I" or "R") grades are not included in this computation until converted to a letter grade.

REPEATED COURSES

Students may repeat any course at any grade level below "A". The grade from the *first repeat* of a given course will *replace* the first-time grade for the computation of the QPR, **the original grade however, will remain on the transcript.** Grades earned on subsequent repeats of the course will be included in the computation of the QPR. All repeated courses will be so indicated on the transcript.

PASS/FAIL OPTION (FREE ELECTIVES ONLY)

Undergraduate students may elect to take up to 6 courses in an academic degree program on the pass/fail basis. Only free electives may be chosen for the pass/fail option, and no more than two courses may be on that basis in a given semester. Request to take a course on the pass/fail basis must be made in writing on the appropriate form after registration in the course, but absolutely no later than the tenth day of scheduled classes in a regular semester, the fifth day for a ten-week course, or the third day for a five-week course. Students should review the complete regulations with their advisors before requesting the pass/fail option through the Registrar's Office.

INCOMPLETE WORK

Incomplete grades ("I" or "R") must be recorded by the date stipulated by the Registrar at the end of the semester. No incomplete will be so recorded by the Registrar unless it is accompanied by a clear indication from the course instructor of the nature of the work to be made up. The Registrar will provide appropriate forms with grade sheets. This information will be placed in the student files.

a. An "I" (incomplete) grade designates incomplete work in a course at the time of grading for reasons beyond the control of the student and determined to be bonafide by the instructor. These would include absence from a final examination or inability to complete terminal assignments due to illness, employment conflicts, etc. **In such cases where the "I" grade is awarded the incomplete**

will revert to a failing grade if the unfinished work is not satisfactorily completed by the end of the semester immediately following the one in which the incomplete was granted, exclusive of the summer sessions. This time can be extended by the instructor for bonafide reasons.

b. A grade of "R" indicates incomplete work in thesis, research, or undergraduate or graduate student project courses. The "R" grade must be removed within a period of time specified by the instructor/mentor/project advisor or director. It must be within the maximum time allowable for degree completion in the academic program where the degree is being sought.

"W" GRADES

No student may withdraw from a course without the knowledge of his/her academic advisor, as indicated by that advisor's signature on the appropriate form. Withdrawal "W" grades are assigned based on the following policy statements:

1. If the student officially withdraws from a course during the official change of registration period, that course does not appear on the student's transcript. This includes withdrawals initiated by the student and those initiated by the University (e.g., cancellation of course sections).
2. If a student officially withdraws from a course after the official change of registration period, but before the end of the official withdrawal period in a given semester or summer session, a grade of "W" is assigned and that course remains on the student's transcript. Courses with the grade of "W" do not count toward the Q.P.R. and do not count toward "hours attempted."
3. The names of students who have officially withdrawn from a course and received the grade of "W" are so listed on the class roster for the balance of the semester.
4. Any exceptions to the above, including "late" withdrawals, must be individually approved by the appropriate Dean or Director and the Provost before they become official and are recorded.

Off-Campus Study

Matriculated students are expected to take the courses for their degrees at the University of Bridgeport. Permission to take courses at other institutions for transfer credit will be given only for good and valid reasons and must be approved **in advance and in writing by the student's advisor.** Permission will not be granted for courses currently offered by the University or courses within the last thirty semester hours before graduation, or for courses previously failed at the University.

Matriculated students may not take courses at junior or community colleges for transfer credit at the junior or senior level toward their degrees.

CREDIT FOR LIFE WORK EXPERIENCE (CLWEP)

Some students acquire mastery over course subject matter through prior work or training experience. Many departments have developed examination and other assessment procedures to provide the possibility of credit for those experiences which correlate to specific course offerings in the University Catalog.

CLWEP credit may not be used to satisfy the minimum University 30-hour residency requirement. CLWEP credit is included in the student's semester hours earned at the University and also in the total number of UB hours used to determine eligibility for graduation honors. However, such credit is not computed in the student's quality point ratio at the University. Information on subject matter and evaluation procedures is available in the office of the Director of the School of General Studies.

COLLEGE LEVEL EQUIVALENT PROFICIENCY EXAM (CLEP)

The University of Bridgeport participates in the Educational Testing Service's College Level Equivalent Proficiency Exam program. The basic purpose of this program is to give the student and non-traditional learner a means for assessing their levels of achievement and for requesting college credit for such achievement.

Undergraduate students may earn up to 30 semester hours of credit (one year's studies) by demonstrating subject area competence through testing. CLEP credit may not be used to satisfy the minimum University 30-hour residency requirement. CLEP credit is not included in the student's credit hours earned at the University of Bridgeport and is not computed in the student's quality point ratio at the University. CLEP credit is not considered in the total number of UB hours used to determine eligibility for graduation honors.

Information on subject matter and testing procedure is available in the office of the Director of the School of General Studies.

ADVANCED PLACEMENT

A student may enter the University of Bridgeport as a freshman, but with advanced standing toward a degree. Advanced standing may be achieved by taking the Advanced Placement examinations administered by the College Entrance Examination Board. A score of three or above allows the student to earn up to eight credits in one subject area. Well qualified students may also earn advanced placement by taking courses for college credit while in secondary school. Information regarding Advanced Placement is available in the Office of Admissions.

Academic Status of Students

The following policies and standards define the minimum requirements for maintaining academic status in the undergraduate degree programs of the University. Higher requirements may be established by the faculty for specific programs, subject to approval by appropriate College committees, the appropriate senior administrator of the College or School and the Provost. Such requirements are described in the appropriate section of this catalog.

NORMAL ACADEMIC PROGRESS

Normal academic progress refers to a student's scholastic status in a degree program.

FULL-TIME STUDENTS

Normal academic progress is maintained by a student who:

1. Has been accepted into a degree program;
2. Is fulfilling the requirements of that degree program as described in this Catalog;
3. Has a cumulative quality point ratio of at least 2.0 ("C" average), or that required by the specific degree program if it is higher than 2.0; and
4. Registers for and completes at least 12 semester hours of credit each term (excluding co-op terms).

PART-TIME STUDENTS

Normal academic progress is maintained by a student who:

1. Has been accepted into a degree program in a College of the University;
2. Is fulfilling the requirements of that degree program as described in this catalog; and
3. Has a cumulative quality point ratio of at least 2.0 ("C" average), or that required by the specific degree program if it is higher than 2.0.
4. Registers for and completes between 1 and 11 semester hours of credit each term.

The student who is not maintaining normal academic progress will be permitted to remain in a degree program while attempting to reestablish normal academic progress, unless and until the student is subject to academic separation as described below.

A student may be awarded a degree only when all degree requirements have been satisfied. In particular, a student who has failed to maintain normal academic progress at some point, must have reestablished normal academic progress before a degree is awarded.

Academic Separation

The following policies and procedures apply to all students, both matriculated and special.

FULL-TIME STUDENTS

In order to maintain satisfactory progress as a full-time student, it is necessary to attempt a minimum of 12 credits per semester. A full-time student whose quality point ratio is below 2.0 for a given semester is sent a letter of warning at the end of that semester.

A full-time student, who has attempted fewer than 19 semester hours and whose quality point ratio is below .75 is automatically separated.

A student is automatically separated from the University when the cumulative quality point ratio and UB semester hours attempted are as follows:

UB SEMESTER HOURS ATTEMPTED*	QPR
24	Below 1.5
48	Below 1.7
72	Below 1.9
96 or more	Below 2.0

** Retaking a course does not count toward this total.*

Maintaining satisfactory academic progress is essential in order to remain eligible for financial aid. Please refer to the financial aid section for further information on maintaining eligibility for financial aid.

PART-TIME STUDENTS

A student, after completing 10 semester hours, is automatically separated from the University when the cumulative quality point ratio and UB semester hours attempted are as follows:

UB SEMESTER HOURS ATTEMPTED*	QPR
24	Below 1.5
48	Below 1.7
72	Below 1.9
96 or more	Below 2.0

READMISSION

A student who has been separated from the University under the above provisions may apply for readmission to the University no sooner than one full semester after separation. A readmission form is available from the Office of the Registrar. No course work at the University of Bridgeport is permitted during the period of separation.

NOTIFICATION

A student will be notified of his/her separation before the beginning of the following semester. It is, however, the student's responsibility to be aware of his or her academic status at all times.

APPEALS

Actions taken under the regulations pertaining to Academic Separation may have an immediate impact on a student's eligibility for financial aid. Students may appeal actions taken pursuant to these regulations. Appeals must be made in writing directly to the Dean of the student's college within ten calendar days of receipt of notice of the action taken. The decision of the Dean will be made within twenty-one calendar days of the date of the receipt of the appeal.

An appeal of separation from the University that is granted places the student in a probationary status. The conditions of this status, including its maximum duration, will be specified in the Dean's decision granting the appeal.

Change of Status

FROM FULL-TIME TO PART-TIME

Students wishing to transfer from full-time to part-time status must secure the necessary forms from the Registrar's Office.

FROM PART-TIME TO FULL-TIME

Students wishing to transfer from part-time to full-time status must secure the necessary forms from the Registrar's Office.

Academic Honors

PRESIDENT'S LIST

A full-time student who, in a given semester, completes 12 or more semester hours with a quality point ratio of 3.7 or higher and with no incomplete grades is named to the President's List at the end of that semester. A part-time student who is matriculated and who, during a regular academic year, completes 12 or more semester hours with a quality point ratio of 3.7 or higher and with no incomplete grades is named to the President's List at the end of the academic year.

DEAN'S LIST

A full-time student who, in a given semester, completes 12 or more semester hours with a quality point ratio of 3.2 or higher and with no incomplete grades is named to the Dean's List at the end of that semester. A part-time student who is matriculated and who, during a regular academic year, completes 12 or more semester hours with a quality point ratio of 3.2 or higher and with no incomplete grades is named to the Dean's List at the end of that academic year.

HONORS COLLEGE

The College of Graduate and Undergraduate Studies houses an Honors College which has as its goals the recognition of superior academic achievement, the provision to superior students of a curriculum that challenges and rewards their achievements and motivation, and a structured forum for the exchange of ideas. Admission to the Honors College is open to all Baccalaureate Degree candidates and is very competitive, based upon a mix of criteria including, where applicable, SAT and/or ACT test results, class standing, grade point average, recommendations, and a formal essay. For details please see the Honors College entry under "Degree Programs."

NATIONAL HONOR SOCIETIES

Honor societies include Phi Kappa Phi, all University; Beta Alpha, accounting; Kappa Pi, art; Alpha Sigma Lambda, part-time students; Pi Omega Upsilon, dental hygiene; Delta Tau Kappa and Pi Gamma Mu, international and national social science; Sigma Beta Delta, business administration; Eta Kappa Nu, electrical engineering; Upsilon Pi Epsilon, computer science; and Sigma Xi, research and scholarship.

Requirements for the Bachelor's Degree

(Requirements for the Associate's degree are listed later in this catalog in the appropriate College or School section.)

The stipulations in the list immediately below are only those which are common to the awarding of the Bachelor's degree. However, requirements specific to each College or School and to individual curricula and disciplines within each College or School also exist. The student must be especially careful to note all of these, since fulfillment of graduation requirements is the individual student's responsibility. No permission for deviation from published requirements is official unless it is made in writing and signed by the senior administrator of the College or School from which the degree is sought. It is recognized that the requirements for graduation in individual Schools may change. A student must meet the requirements for graduation which are current at the time of graduation, and consistent to the greatest extent possible with the degree requirements in existence at the time of the student's entry into the major. However, whenever a program is altered it is the University's responsibility to translate the student's previously completed work into the new program requirements so that the continuously enrolled student is not penalized for the adaptation. The only exception would be when the state or other licensing agency imposes a new requirement. The common requirements for awarding the Bachelor's degree follow.

A student must:

1. Have been admitted as, or have achieved the status of, a matriculated student in the College, and must have attained upperclass or major status.
2. Have completed the last thirty semester hours of work toward his or her degree under the direct auspices of the University. Under exceptional circumstances, the senior academic administrator may slightly modify this requirement.
3. Present an overall cumulative quality point ratio of at least 2.0 and, in addition, must have a quality point ratio of 2.0 or better in those courses taken for credit in the major. Each individual course in the major must be passed with a grade of "C-" or better. The student must have earned the number of semester hours of credit required by the College or School and must not deviate from the curriculum as displayed in this catalog without the written approval of the appropriate senior academic administrator or his/her designate.

GRADUATION HONORS

Candidates for graduation who have completed at least sixty semester hours of academic course work at the University of Bridgeport in their junior and senior years are eligible for honors upon recommendation of the appropriate College faculty. The following standards are used:

1. The Bachelor's degree *cum laude* may be awarded to a student whose cumulative quality point ratio is at least 3.40.
2. The Bachelor's degree *magna cum laude* may be awarded to a student whose cumulative quality point ratio is at least 3.60.
3. The Bachelor's degree *summa cum laude* may be awarded to a student whose cumulative quality point ratio is at least 3.80.

These standards are to apply to all students entering the University in the fall of 1995 and thereafter. These standards will also apply to any student returning to the University after a leave of absence. The extant standards will apply to all students who matriculated prior to the fall of 1995.

The Associate's degree may be awarded cum laude to a candidate with a minimum quality point ratio of 3.2 and magna cum laude to those with 3.5. A minimum of 45 semester hours must have been earned at the University of Bridgeport.

GRADUATE REGULATIONS AND PROCEDURES

General Regulations

1. The mere completion of courses and requirements does not guarantee continuation in the graduate program or advancement to degree candidacy.
2. Every student must consult with his/her assigned advisor to ensure a carefully planned program of studies.
3. A graduate student is expected to maintain a 3.0 QPR. A graduate student whose QPR drops below 3.0 will be placed on academic probation, and he/she may be separated from the academic program by the College Dean unless substantial improvement is demonstrated during the semester following academic probation. A graduate student who receives a grade of "D" or "F" in any course will be placed on academic probation, and a second "D" or "F" grade will result in separation from his/her program. A graduate student whose academic program is terminated may appeal this action to the Dean.
4. A graduate student is expected to complete his/her degree program within seven years of admission. A student may, for sound and valid reasons, request his/her College Dean for an extension of this time limit. Such a request must have the approval of the student's advisor, Department Chair, and School Director.
5. The amount of graduate work transferable to a graduate degree is limited to two graduate courses. Courses applied to one degree or diploma normally are not transferable to a second degree or diploma. Courses presented for transfer credit must be graduate level study completed with a grade of "B" or above at an accredited institution. The transferred courses should have been completed within the past seven years.

   The approval of additional transfer credit and waivers of the course time limit may be granted based on the approval of the Department Chair, School Director, and College Dean.
6. The requirements for a master's degree shall include at least one of the following: a comprehensive examination, a written thesis based on independent research, or completion of an appropriate special project.

Classification of Students

DEGREE STUDENTS

All students who have formally declared their intent to pursue a program leading to a specified graduate degree are classified as Graduate Degree students and may fall into one of the following categories:

REGULAR

A student who has completed all the admission requirements and who has presented a background of scholarship and performance that indicates his/her capacity to profit from and complete a degree program is admitted as a regular degree student.

PROVISIONAL

A student who has met the general requirements for admission, but not those for full standing because the promise of achievement in the area of intended study cannot be accurately appraised at the time of admission, is admitted provisionally subject to conditions stated on the Certificate of Admission.

DEGREE CANDIDATE

A regular degree student who has successfully completed the first 12 hours of graduate study under the direction of assigned advisors and is, in the opinion of the faculty, worthy of continuing the pursuit of an advanced degree at the University, is a degree candidate. **Application for degree candidacy must be filed with the major department after completion of 12 semester hours.**

NON-DEGREE GRADUATE STUDENTS

SPECIAL STUDENT

A college graduate from an accredited institution, who elects to take courses for which he/she is qualified but who has not been admitted to a degree program, is classified as a *special* student on the graduate level. If subsequently admitted to a degree program, there is no guarantee that courses taken as a special student will be counted towards the degree requirements; in any case, *only twelve semester hours may be applied to a degree.* Those graduate students classified as special graduate students are, therefore, urged to indicate to the Office of Admissions and the Registrar whether they wish to change their status to regular degree student prior to or immediately upon completion of twelve semester hours. Special students are not permitted to pursue coursework in the M.B.A. program.

In order to register for graduate courses as a special student, a completed *Application for Graduate Studies* must be on file in the Office of Admissions.

CERTIFICATE STUDENT

A graduate student who enters into a planned program for certification purposes, but who, for various reasons, does not pursue a graduate degree program is classified as a Certificate student.

Evaluation and Grading of Course Work

"A" indicates distinction; for work of exceptional quality.

"B" indicates above-average achievement; quality expected of a graduate student.

"C" indicates minimal achievement; not up to standards of graduate work.

"D" indicates below average achievement; no graduate credit possible.

"I" and "R" indicate incomplete graduate course work.

(a) An "I" (incomplete) grade designates incomplete work in a course at the time of grading for reasons beyond the control of the student and determined to be bonafide by the instructor. These would include absence from a final examination or inability to complete terminal assignments due to illness, employment conflicts, etc. In such cases where the "I" grade is awarded the incomplete will revert to a failing grade if the unfinished work is not satisfactorily completed by the end of the semester immediately following the one in which the incomplete was granted, exclusive of the summer sessions. This time can be extended by the instructor for bonafide reasons.

(b) A grade of "R" indicates incomplete work in thesis, research, or undergraduate or graduate student project courses. The "R" grade must be removed within a period of time specified by the instructor/mentor/project advisor or director. It must be within the maximum time allowable for degree completion in the academic program where the degree is being sought.

"W" indicates approved student withdrawal.

In addition to the above, the grades of "A-", "B+', "B-', "C+', "C-" and "D+" may be assigned for graduate courses.

Semester Hours Carried Per Semester

Twelve semester hours of credit per term normally is considered a maximum full-time program for graduate students. A student desiring to take more than 12 semester hours must receive written permission from his/her advisor and the Dean or Director of the appropriate college or school.

Students who are fully employed may take no more than six semester hours per semester, unless written permission from an advisor is received.

Tuition and Expenses

All charges are payable in full one month prior to the first day of classes for each semester. After that date, interest at the rate of 1 percent will be assessed each and every month on all unpaid balances until the bill plus interest is paid in full. The student receives no reduction in charges for temporary absence from classes or residence hall, and no refund if he or she is suspended or dismissed or leaves the University or residence hall for any cause. Students with outstanding balances will not be allowed to register for the following semester.

The supplying of placement papers, transcripts and other records of the student is a service of the University which is available only if the student is not in default under any obligation to the University. Thus, this service will be automatically suspended during the period of any such default.

The student will not receive grades, a diploma, a certificate, or a transcript of his academic record until all financial obligations to the University have been met.

If an account becomes severely delinquent and the University is forced to submit the account to an outside agency for collection, the costs of same will be added to the student's balance.

The tuition fee does not include the cost of books and supplies. These must be purchased by the student. The student should inquire about the cost of special materials, equipment and uniforms required for specialized courses.

The University does not assume responsibility for the loss of personal property of students either on or off the campus. It is recommended that students protect themselves against such losses by consulting with their own (or with their parents) insurance agent in regard to coverage provided by existing policies, if any; or by purchasing private property insurance through a private agent.

Schedule of Charges

The tuition and fees listed below are for the academic year 1997-98.

The University reserves the right to change the following schedule of fees and rates at any time without notice.

Application Fees

DOMESTIC STUDENTS	**$35**
INTERNATIONAL STUDENTS	**$50**
DOCTORAL STUDENTS	**$50**
CHIROPRACTIC	**$75**
NATUROPATHIC	**$75**

These fees are not refundable and should be paid by check or money order, and must accompany the application for admission.

Deposits

ADVANCED TUITION DEPOSIT $200

This deposit is required of all students upon acceptance to the University. The deposit is applicable to the Fall semester and is fully refundable until June 1.

Thereafter, until and including the first day of registration, it is one-half refundable. The deposit is not refundable thereafter.

CLINICAL USAGE DEPOSIT $250

In the case of the Fones School of Dental Hygiene, this deposit must be received within two weeks of notification of admission. If it is not received, applicant's name will be put on a waiting list and will no longer be guaranteed admission. Because enrollment is rigidly limited by the capacity of the clinic, this procedure is necessary to reserve facilities for those who definitely plan to attend.

RESIDENCE HALL ROOM DEPOSIT FOR NEW AND RETURNING STUDENTS $200

Students required to live in the University Residence Halls or those wishing to reserve a space, are required to pay this deposit to reserve room assignments. It will be applied to the Fall semester rental agreement.

Undergraduate Tuition

FULL-TIME STUDENT $6,500
(12 through 18 semester hours) each semester

(except as follows)

Additional undergraduate semester hours $310
(over 18) per semester hour

Additional undergraduate semester hours, exceeding 18 per semester, must be approved by the College Dean or School Director and will be charged at the rate of $290 per semester hour above the flat full-time rate.

All International Students must maintain full-time status and therefore, register for 12 or more semester hours. Students matriculated as full-time students as determined by the Office of Admissions must maintain full-time status unless approved in writing in advance of the semester.

APPLIED MUSIC PER SEMESTER $320

One half-hour private lesson a week for each semester.

Fees for organ students will vary according to the number of hours required each week for practice.

PART-TIME TUITION $310
(1-11 semester hours) per semester hour

This tuition rate is reserved for those students who are attending the University of Bridgeport either as a non-matriculated special student or as a matriculated part-time student as determined in advance by the Office of Admissions.

NONCREDIT (AUDITING) $120
Per course

Tuition and Expenses

Graduate Tuition

FULL-TIME AND PART-TIME STUDENTS
(1 to 12 semester hours)

School of Science, Engineering & Technology **$340** per semester hour

School of Business **$340** per semester hour

School of Education and Human Resources **$320** per semester hour

College of Chiropractic **$5,900** per semester

College of Naturopathic Medicine **$6,400** per semester

Nutrition Program **$320** per semester hour

Students registered for 13 or more credits **$6,500**
(maximum 16 credits)

NONCREDIT (AUDITING) **$120** per course

Special Program Fees for Full-time Students

SCIENCE & ENGINEERING MAJORS **$125** each semester

ARTS & DESIGN MAJORS **$60** each semester

DENTAL HYGIENE MAJORS

First semester	**$800**
Second semester	**$800**
Third semester	**$500**
Fourth semester	**$500**

Residence Hall Charges

(Dorm rates are per semester)

Double Occupancy **$1,850** each semester

Single Occupancy **$2,080** each semester

Double as a Single **$2,625** each semester

Triple as a Double **$2,300** each semester

Triple as a Triple **$1,740** each semester

All full-time unmarried undergraduate students who do not live at home with their parents are required to live in a University residence hall, unless granted a release by the Dean of Students.

Releases to live off-campus can be granted for each semester. Requests for releases must be received by the Office of Residence Halls by April 1 preceding the academic year for which the release is requested. To obtain an off-campus release, the student must fulfill one of the following requirements.

a. Must have attained the age of 21 by September of the academic year; or must have accumulated 57 credits by June 30 of the current year.

b. Must have completed a tour of duty (one year or more) in the military service.

Students are expected to keep their rooms and furnishings in good condition. On the basis of the appraisal made at or before the end of the academic year, students will be assessed for damage to University property and equipment. During vacation periods, a room rental fee will be assessed unless campus presence is dictated by an official University program.

Meals

Meal plan charges are per semester.

All residence hall students are required to eat in the Dining Hall. The inclusive rate for room and board does not include meals during any vacation. Should a dining room be open during such a period, residence hall students will be expected to pay additional charges for their meals.

PLAN A **$1,555**
Any 19 meals per week

PLAN B **$1,445**
Any 12 meals per week

Other Charges

REGISTRATION FEE **$25**
(All students) per semester

CAMPUS IDENTIFICATION & SECURITY FEE

FULL-TIME STUDENT **$80**
per semester

PART-TIME STUDENT **$25**
per year

SECURITY DEPOSIT **$50**
(Undergraduate Only)

This deposit is payable at registration or before as a one-time deposit and is fully refundable (less damages) upon graduation or after the student's official withdrawal, provided the student fulfills all of the conditions for official withdrawal stated in this Catalog.

STUDENT ACTIVITY FEE **$10** per semester

GENERAL UNIVERSITY FEE **$180**
(Full-time students only) per semester

GRADUATION FEE **$80**

HEALTH INSURANCE **$386**
(Required of ALL Full-time Students) per year

Any full-time student who presently has adequate medical insurance and wishes not to carry the University's Health Plan, may fill out a waiver at the Bursar's Office and the charge will be removed from account. For more information about the Student Health Insurance Plan, contact the Bursar's Office, Wahlstrom Library, 6th floor.

ACCIDENT INSURANCE **$54.00**
(Required of ALL Full-time Students) per year

HEALTH AND ACCIDENT INSURANCE **$440**

(Required of all International J1 students)

Company Reimbursed Tuition

The University of Bridgeport has a long standing partnership with the local corporate community to provide its employees with excellent educational opportunities which can lead to degrees and career advancement. In order to facilitate this important relationship, the University maintains the following policies:

A. DIRECT PAYMENT

Students whose company pays the University directly must submit a letter on company letterhead verifying eligibility before registering.

B. STUDENT REIMBURSEMENT

1. All prior balances must be paid.
2. To defer payment, students must submit a letter on company letterhead verifying eligibility and company policy.
3. 50% payment will be required at time of registration.
4. Students who request deferred payment will be charged a 1% interest fee per month.
5. Payment in full is expected no later than **30 days** after the semester ends, or prior to the start of the subsequent semester, regardless of grade.
6. A Grade and Fee Report will be mailed to every student with a company letter on file.

Refund Information

Students eligible for a refund due to overpayment, student loan credits or changes in course load, should make a written request following the 5th week of the semester. Requests should be made in writing to the Bursar's Office, Wahlstrom Library, 6th floor.

FALL SEMESTER 1997 REFUND POLICY

ON OR BEFORE JUNE 1, 1997

Tuition Deposit — 100% refund

Room Deposit — 100% refund
(50% for returning students)

Board Deposit — 100% refund

JUNE 1 THRU DAY BEFORE CLASSES BEGIN, 1997

Security deposit of $50 — 100% refund

Tuition — 100% refund except $200 deposit

Room — 100% refund except $200 deposit

Board — 100% refund

FROM FIRST DAY OF CLASSES, 1997/98

Security deposit of $50 — 100% refund on unused balance

Tuition, room and board

a. First week — 80% refund

b. Second week — 60% refund

c. Third week — 40% refund

d. Fourth week — 20% refund

e. Fifth week — No refund

All fees are not refundable.

AFTER FOURTH WEEK OF CLASSES

No refund.

STATUTORY PRO-RATA REFUNDS

Students who attend the University of Bridgeport as a first time, first year student and withdraw from the university are subject to a pro-rata refund as prescribed by federal regulation. Pro-Rata refunds apply to students who withdraw on or before the 60% point in time of the enrollment period for which they are charged.

Financial Aid and Financial Services

Director: Dominic Yoia
Wahlstrom Library, 6th floor
126 Park Avenue, Bridgeport, CT 06601

Financial Aid

The Office of Financial Aid helps provide access to the educational opportunities available at the University of Bridgeport. Since students are admitted solely on the basis of their academic and personal qualities, without regard to their financial circumstances, the University offers a variety of financial aid and scholarship programs to provide financial assistance to qualified students.

The University of Bridgeport subscribes to the policy that eligibility for scholarship aid should depend on the student's achievement and promise, but that the amount of aid should depend on the relative financial need of the student and his or her family.

The financial need of most students at the University is met in the form of scholarships, grants, loans and student employment. Funds are available to the student through the University of Bridgeport from federal and state governments, private foundations and university resources.

The University of Bridgeport awards a limited number of merit scholarships recognizing outstanding academic achievement and student leadership. In addition, there are a number of other payment assistance programs that include family tuition plan, and non-University tuition plans.

The Office of Financial Aid determines the amount and combinations of aid for which the student is eligible. Financial aid decisions are made after a student has been admitted and requests for financial assistance will not influence a candidate's consideration for admission. Financial aid is awarded on an annual basis and continuing students must apply each year for aid.

Application Procedures

New students are encouraged to begin to apply for financial aid at the same time they are seeking admission. Applicants for financial aid need to:

1. Complete the Free Application for Federal Student Aid (FAFSA) and forward it to the processing agency, requesting that a report be sent directly from the agency to the University of Bridgeport. Submit the official Institutional Student Information Record (ISIR) to the Office of Financial Aid when you receive it from the Processing Center.
2. Complete the University of Bridgeport Financial Aid Application.
3. Submit copies of students' and parents' federal tax forms upon request from the Office of Financial Aid.
4. Transfer students must submit a financial aid transcript from each institution previously attended, even if no aid was received.
5. Submit immigration documentation certifying permanent resident status, if you are a non-U.S. citizen applying for need-based financial aid.

Continuing students must reapply for financial aid each year and must reapply no later than April 15 to be given full consideration for aid for the following academic year. Students must:

1. Complete the Free Application for Federal Student Aid (FAFSA) and forward it to the processing agency, requesting that a report be sent directly from the agency to the University of Bridgeport. Submit the official Institutional Student Information Record (ISIR) to the Office of Financial Aid when you receive it from the Processing Agency.
2. Complete the University of Bridgeport Financial Aid Application.
3. Submit copies of students' and parents' federal tax forms.

Students and parents are encouraged to call or visit the Office of Financial Aid if they have any questions or would like assistance with the application process. For further information call or write:

Office of Financial Aid, 126 Park Avenue, Bridgeport, CT 06601, (203) 576-4568 or toll free 1-800-898-8278.

Satisfactory Academic Progress

FULL-TIME STUDENTS

In order to maintain eligibility for financial aid the full-time student must be able to complete all requirements for the degree within 6 years. In addition, the student must maintain a quality point ratio as shown in the following table:

POINT RATIO ATTEMPTED (includes transfer credits)	QPR MUST BE AT LEAST
24 credits	15
48 credits	1.7
72 credits	1.9
96 credits or more	2.0

HALF-TIME STUDENTS

In order to maintain eligibility for financial aid, the half-time student (students taking less than 6 credits per semester are generally not eligible for financial aid) must be able to complete all requirements for the degree within 12 years. In addition, the student must maintain a quality point ratio as shown in the following table:

POINT RATIO ATTEMPTED (includes transfer credits)	QPR MUST BE AT LEAST
12 credits	1.5
24 credits	1.5
36 credits	1.7
48 credits	1.7
60 credits	1.9
72 credits	1.9
84 credits	2.0
96 credits or more	2.0

PROVISIONAL AID RECIPIENTS

Students who fall below the minimum Satisfactory Academic Progress (SAP) standards as outlined in this section are eligible to receive aid on a provisional basis. At the end of the provisional semester, the student must attain a cumulative QPR consistent with minimum SAP requirements in order to continue receiving aid. Students who do not meet these minimum requirements will lose eligibility for aid, regardless of their academic standing at the University. A student can regain eligibility for aid once minimum SAP requirements are met.

REINSTATEMENT OF AID

If a student is re-admitted the University will consider the student's application for financial aid. Reinstatement of aid is not automatic and the student must meet with the Office of Financial Aid to reapply. In order to remain eligible for aid, students must meet the minimum academic progress standards as outlined or lose eligibility for the following semester.

University of Bridgeport Programs

The University of Bridgeport awards the following grants and scholarships on a competitive basis. There are a limited number of awards available and students are urged to apply as early as possible. All awards are renewable for four years based on satisfactory academic achievement and good standing at the University. Students who are enrolled in accelerated/professional courses are not eligible for these awards.

ACADEMIC EXCELLENCE AND LEADERSHIP SCHOLARSHIP

The University of Bridgeport strives to support academic excellence and to foster and promote in its students the leadership qualities necessary for the challenges the world will present them upon completion of their formal studies. To this end the University supports approximately 165 full tuition, room and board scholarships for students with exceptional academic accomplishments who also demonstrate significant leadership potential. As an international institution the University strives to extend these scholarships to a worldwide audience, and the program currently supports students from approximately 40 countries, including the United States. This program is not need based and is open to students in all fields of major, undergraduate baccalaureate study. The scholarship ordinarily covers 8 semesters of full-time study.

CHALLENGE GRANT

This grant is awarded to students who have an SAT score of at least 950 and rank in the top half of their class.

ACADEMIC GRANT

This grant is awarded to students who have an SAT score of at least 1050 and rank in the top third of their class.

ACADEMIC SCHOLARSHIP

This scholarship is awarded to students who have an SAT score of at least 1100 and rank in the top fifth of their class.

Federal Title IV Programs

FEDERAL PELL GRANT

Pell Grants are awarded to undergraduate students who have not earned a bachelor's or professional degree. Pell Grant awards are based upon the student's Estimated Family Contribution (EFC), enrollment status, cost of attendance, and the number of credit hours in which the student is enrolled. The maximum grant a student can receive for the 1997/98 award year is $2700.00.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (FSEOG)

The FSEOG is a grant that does not have to be repaid. Priority is given to the neediest students with the lowest EFC's who are PELL eligible. Students who have submitted their financial aid applications by the University's deadline will be given first priority. All other students will be given consideration for FSEOG funds on a first come first serve basis pending the availability of funds. FSEOG awards vary and cannot exceed $4000.00 for the award year.

FEDERAL WORK STUDY (FWS)

The Federal Work Study Program provides jobs for both undergraduate and graduate students who demonstrate financial need. The amount of the FWS award is based on both the student's need and the availability of funds at the University. While there are several FWS jobs available on campus, students are also encouraged to work in community service related jobs.

FEDERAL PERKINS LOAN PROGRAM

A Federal Perkins Loan is a low interest (5%) loan for both undergraduate and graduate students who demonstrate exceptional financial need. Award amounts vary and cannot exceed $3000 for each year of undergraduate study and $5000 for each year of graduate or professional study.

FEDERAL STAFFORD LOAN (SUBSIDIZED)

The Federal Stafford Loan is awarded on the basis of financial need. The interest rate on this loan is variable and cannot exceed 8.25%. Eligible freshmen may apply for up to $2,625, sophomores $3,500, juniors and seniors $5,500 per academic year to an aggregate level of $23,000. Eligible graduate students can borrow up to $8,500 per academic year to an aggregate level of $65,000. For first time borrowers, the first disbursement of this loan cannot be released until the student has been in school for thirty days.

FEDERAL STAFFORD LOAN (UNSUBSIDIZED)

The Federal Stafford Loan (Unsubsidized) is awarded to independent students who demonstrate remaining financial need. The interest rate on this loan is variable and cannot exceed 8.25%. Eligible freshmen and sophomores can apply for up to $4,000, while juniors and seniors can apply for up to $5,000 per academic year. The aggregate amount for undergraduate students is $23,000 and $73,000 for graduate and professional students. For first time borrowers,

the first disbursement of this loan cannot be released until the student has been in school for thirty days.

FEDERAL PLUS LOAN

The Federal PLUS Loan program provides credit worthy parents of dependent undergraduate students the ability to borrow up to the cost of attendance less any financial aid awarded. The interest rate for this loan is variable and cannot exceed 9%. For parents whose dependent is a first time borrower, the first disbursement of this loan cannot be released until the student has been in school for thirty days.

State Programs

As an independent University, the University of Bridgeport participates in the Connecticut Independent College Student Grant Program. Connecticut undergraduate students who enroll on a full-time basis at the university who demonstrate financial need are considered for this grant. The amount of the grant varies from year to year and is based upon state allocations.

Graduate Sources

GRADUATE ASSISTANTSHIPS

Graduate Assistantships are available to full-time graduate students for the academic year. Tuition remission for 9 hours per semester and a possible stipend are granted, based on the decision of the dean or director. Graduate Assistants teach six hours per semester or perform other academic duties. For information, write to the College Dean's or Director's Office. Deadline for application is April 1 for the Fall semester.

RESIDENCE HALL DIRECTOR POSITIONS

A limited number of Residence Hall Director positions are available to graduate students carrying six or more hours per semester. These provide compensation ranging from free room to free apartment and stipend, depending on appointment. For information write the Office of Residential and Commuter Affairs, John J. Cox Student Center, Bridgeport, CT 06601.

REGULAR STUDENT EMPLOYMENT

Students may use listings to find regular part-time employment. Jobs are available on campus and in the local community. These listings are available in the Office of Financial Aid.

Named Scholarships

UNDERGRADUATE

Alumni Athletic Scholarship Fund. The Alumni of the University have established the Fund to be awarded to deserving athletes. Preference will be given to athletes in sports not fully funded by the University. This Alumni Fund was started in 1988 through the generosity of Alumni Association President Armand Cantafio '57.

The Michael J. Autuori Scholarship. For academic excellence in Anatomy and Physiology for a student in the Fones School of Dental Hygiene.

The Rudolph F. Bannow Memorial Scholarship. Established by the employees of Bridgeport Machines, Inc., in memory of the late Rudolph F. Bannow, president of Bridgeport Machines, Inc., trustee of the University, and civic leader.

The Sayde and Samuel Baum Scholarship Fund. Established by Gerald Baum of Fairfield, president of Eastern Bag and Paper Company, with his wife, Louise, in honor of his parents who founded the company. Income will be awarded to employees or children of employees of the Eastern Bag and Paper Company.

The Alfred V. Bodine Memorial Scholarship Fund. Established by contributions from friends in memory of Alfred V. Bodine and by a bequest from the estate of Mr. Bodine. Alfred Bodine was a Bridgeport industrialist and civic leader and was chairman of the University of Bridgeport Board of Trustees at the time of his death.

Bridgeport Dental Association Fones Scholarship. To be awarded to a prospective Fones School of Dental Hygiene student based upon academic standing as determined by UB's Financial Aid Office.

George C. Brown & Carol M. Wright Alumni Scholarship. Established by Alumni George C. Brown '64 and Carol M. Wright '88. Income from interest on the endowment will be awarded annually to a student who has exhibited an interest in the Middle East and desires a better understanding of the region's politics, history, arts or culture.

Armand J. Cantafio Scholarship. Established by Armand J. Cantafio, President of Northeast Electronics Corporation. To be awarded to a two or four year student in the Health Sciences who is from Fairfield County and is in need of financial aid.

Class of 1973 Scholarship. Established by the 1973 Senior Class as a class gift, the scholarship is open to all undergraduates presently enrolled at the University.

The John and Wanda Cox Scholarship Fund. Established by the family and friends of Mr. and Mrs. Cox in honor of their 25th wedding anniversary and additional gifts received upon the death of Mr. Cox, who was Vice President for University Relations. The annual income is awarded to a worthy and needy student from the Greater Bridgeport area.

The Mr. Leigh Danenberg and Mrs. Elsie Nicholas Danenberg Scholarship. Established by Leigh Danenberg in honor of his parents, both of whom were lifetime authors, journalists, and historians. The award will be made to an undergraduate junior or senior journalism major meeting need and academic standing requirements. First consideration is given to Fairfield County, then Connecticut residents, with special preference to students involved in activities such as *The Scribe*, or student government.

Harold Dart Endowed Scholarship. The income shall be used by the Music Department at the discretion of the chair

of the Music Department. Special preference to be given to an outstanding piano student for a yearly award as determined by the Music Department faculty.

Dean Francis X. Di Leo Memorial Scholarship. The Dean Francis X. Di Leo Memorial Scholarship Fund was established by members of the Di Leo family, colleagues, friends and graduates of the University of Bridgeport School of Business and Public Management in honor of the former dean of the college. The income from the invested principal is awarded to deserving full-time, part-time graduate or undergraduate students enrolled in the School of Business.

Catherine Doyle Scholarship. Established by Frank P. Doyle. Income to be awarded to deserving students, with academic promise and financial need, who are pursuing careers in the Health Sciences.

Dr. Frank J. Dunnigan Scholarship. Established by funds from the Pren-Hall Foundation. Scholarship grants will be awarded to exceptionally qualified students majoring in Business who may be either an entering freshman or have reached any other class level.

Educational Foundation of America. Established by the Educational Foundation of America to be awarded to students pursuing health related careers at the University of Bridgeport who have proven academic ability, financial need and are from Fairfield County.

The Bernard & Eva Ettlinger Scholarship Fund. Annual income from the fund provides an award for worthy students of academic promise and financial need from the State of Connecticut.

The Jeffrey S. Ferguson Memorial Scholarship. Established by Arthur and Ann Ferguson in memory of their son Jeffrey, an outstanding student while at the University, whose death left much potential unfulfilled. First preference is given to a student in Computer Science who is academically gifted and in need of financial aid.

The Milton H. Friedberg Scholarship. Made possible by a gift from the Milton H. Friedberg Fund, Inc. The income from this fund is used for a scholarship, preferably to a student majoring in accounting, otherwise to another student from the School of Business.

The Harry Allison Goldstein Memorial Scholarship. Made possible by contributions from the friends of Mr. Goldstein. Mr. Goldstein had been secretary of the University's Board of Trustees. The scholarships are awarded annually to a young man and a young woman in amounts varying with the applicant's needs.

The Gould Scholarship Fund. Financed from funds of the Gould Foundation, Inc., established under the will of Elizabeth B. Gould. Awards are made to qualified entering freshman women from Fairfield County with provisions for renewal. The scholarships provide $1,500 in the freshman year, $1,250 in the sophomore and junior years, and $1,000 in the senior year. Preference is given to students with academic promise, demonstrated leadership qualities, and financial need.

The Michael and Ida Hoffman Family Fund. Established by Mr. and Mrs. Sidney Hoffman and Mr. and Mrs. Maurice Hoffman in memory of their parents. It honors Michael and Ida Hoffman "who understood and were grateful for the freedom and blessings of America and is to be granted to a student who gives promise of being worthy of this tradition."

The Henry Hollander Scholarship Fund. Established by a contribution from Seymour I. Hollander to perpetuate the memory of his father. Income from the endowment is awarded annually.

Harvey and Joan James. Established by alumnus Harvey James '74 and his wife Joan James. The income generated from the endowment will be awarded annually to a returning student who has demonstrated leadership in academics, campus life, and service to the community.

The Joseph T. and Julia A. Kasper Memorial Scholarship. Established in memory of Joseph T. Kasper and Julia A. Kasper, his wife, by the Kasper Group, Inc. Mr. Kasper, who founded the firm in 1920, served as Bridgeport's City Engineer during the 1960s. Scholarship assistance will be awarded to one African-American or Hispanic student graduating from each of the three Bridgeport high schools and expressing interest in engineering and its related fields. Should there be no eligible candidate as defined above, the criteria can be expanded in consultations with fund representatives.

The Reverend Dr. Martin Luther King Memorial Scholarship Fund. A gift to the University for an endowed scholarship by the members of the Class of 1968.

The Charles and Dorothy Kishibay Scholarship Fund. Established by Professor Charles Kishibay and wife Dorothy. The income provides assistance to junior or senior students in good standing from the greater Bridgeport/Fairfield County area, majoring in Industrial Design.

The Fred E. Lacey Memorial Scholarships. Established by a bequest from the late Fred E. Lacey, former president of the Lacey Manufacturing Company and a Trustee of the University. Income from the trust provides for deserving students in need of financial assistance.

The Paul P. and Paulette Liscio Scholarship Fund. Established by Dr. and Mrs. Paul Liscio, the income from the fund is awarded annually to students in the Fones School of Dental Hygiene. This scholarship is available to students from the State of Connecticut who demonstrate scholastic achievement and financial need.

The Bruce Allen Littlefield Memorial Scholarship. Established by contributions from family and friends to perpetuate the memory of the son of President Emeritus and Mrs. Henry W. Littlefield. In keeping with his interests, students majoring in courses leading to the profession of law are given first preference. The scholarship is awarded annually to an upperclass student.

Dr. Henry W. Littlefield Scholarship Fund. Established in honor of UB President Emeritus, Dr. Henry W. Littlefield. Awarded to entering freshmen or transfer students with excellent academic records. Preference to residents of Southwestern Connecticut who major in Health Sciences.

Sid Litwalk Alumni Scholarship for the Performing Arts. Established by long-time friend of the University and valued alumnus Syd Litwalk '52. Income from the endowment is awarded annually to a student in the performing arts who has demonstrated an exemplary level of commitment.

The Jasper McLevy Scholarship. Created by friends to honor the late Mayor of Bridgeport at the time of his seventy-eighth birthday. Interest from the fund provides scholarships for Bridgeport students in varying amounts depending on need.

The Charles E. Merrill 50th Anniversary Scholarship. Established by the Charles E. Merrill Trust in recognition of the University's 50th Anniversary. Income from an endowment of $20,000 is provided annually as financial aid to students in various fields of Business Administration. The Merrill Trust was founded by Charles E. Merrill in 1973. Mr. Merrill founded the investment firm of Merrill, Lynch, Pierce, Fenner & Smith, Inc. in 1914.

The Gustav Nyselius Memorial Scholarship. Established by the late Gustav Nyselius, founder of Mount Vernon Die Casting Corporation, to enable selected sons and daughters of the company employees to attend the University of Bridgeport.

Palisades Educational Foundation. Established by the Palisades Educational Foundation to be awarded to students pursuing health related careers at the University of Bridgeport who have proven academic ability, financial need, and are from Fairfield County.

The Gerald L. Phillippe Memorial Scholarship. Made possible by members of the Elfun Society, Bridgeport Chapter, of the General Electric Company. The annual income from the endowment is used for a scholarship or scholarships for needy and worthy students of families residing in Fairfield County. First preference is given to students of the minority community.

Harriet Radler Memorial Scholarship. Established by Louis Radler, alumnus and member of the Board of Trustees, provides an annual award with first preference given to a needy, deserving, part-time student.

Harriet M. Radler Memorial Scholarship. Established by Louis Radler, President of Chessco Industries. Scholarship to be awarded to a student enrolled in the Health Sciences, residing in Fairfield County, with academic promise and financial need.

The Mark L. Ritter Alumnus Scholarship. This Scholarship was established to encourage a Marketing major and permanent resident of New York State to pursue studies at the University and who is need of financial aid.

Natalia B. Romalis Scholarship. The scholarship is to be given to a Mathematics major for "Academic Excellence in Mathematics." The Director of the Division of Mathematics & Sciences will appoint a committee of faculty from that division to select the recipient.

Jocelyne Roman Scholarship Fund. Scholarship is awarded to students in Fones School of Dental Hygiene who show academic promise and financial need and are from Fairfield County and/or the state of Connecticut.

Clarence D. L. Ropp Scholarship. Established by the class of 1963 in honor of Dr. Clarence D.L. Ropp, retired dean of the College of Arts and Sciences, in appreciation of his dedicated service and devotion to the University for over thirty-five years. The income from this fund is awarded to a needy senior or seniors who have earned a specified cumulative quality-point ratio.

Wanda B. Russo Health Science Scholarship Fund. Established by Dr. Robert Russo and Wanda B. Russo, a Trustee of the University. Students in Health Sciences residing in Fairfield County, with academic promise and financial need are eligible.

The Scott A. Ryan Memorial Scholarship Fund. Established by Mr. and Mrs. Martin J. Ryan, Jr., in memory of their son. It is awarded on an annual basis to a deserving student majoring in Business.

The Etta and Jack Sabarsky Scholarship. Established by Neil and Michael Mellen in honor of Etta and Jack Sabarsky, in appreciation of the support and encouragement they have given to Neil and Michael at important times in their lives. Awarded annually to a senior majoring in Business who is in financial need and could not complete his/her studies without this scholarship.

The Sam Silverstone Memorial Scholarship. Presented by his daughter, Augusta Silverstone, in memory of her father, and awarded on the basis of need to a graduate of a Bridgeport public high school.

The Drs. Louise and Anthony Soares Scholarship in Teacher Education. The scholarship will be awarded annually, with first preference given to a graduating senior at the University of Bridgeport wishing to pursue a teaching certification or a master's degree in Education at UB. If that person is not available, the scholarship may be awarded to an individual presently enrolled at the graduate level, who has achieved a 3.0 on an undergraduate basis and has financial need.

Charles P. Stetson Scholarship Program. Students are nominated through their high school based on demonstrated high academic ability and evidenced interest in an Outward Bound-type experience prior to start of their freshman year.

The Dr. Robert H.W. Strang Scholarship. Initiated by Mr. and Mrs. Albert D. Mizzy and supported by the Fones Alumnae in honor of Dr. Robert H.W. Strang, director of the Fones School of Dental Hygiene and colleague of the late Dr. Alfred C. Fones. An annual award is made to a student in either the two or four-year program in Dental Hygiene.

The George F. Taylor Scholarship Fund. The George F. Taylor Scholarship will be made available on an annual basis to academically qualified and financially needy students from the Bridgeport high schools majoring in Business.

The Susan Terzian Memorial Scholarship Fund. Established by her mother, Roxy Terzian; her aunt, Rose Gadakian, and friends, associates, and sorority sisters in Omega Phi Alpha, a service sorority, in honor of Susan Terzian. The scholarship is awarded annually to a member of the sorority or to a woman Biology major who has completed her freshman year..

The Robert J. and Phyllis P. Tobin Scholarship. Established by Mr. Tobin and Mrs. Tobin, a University of Bridgeport alumna. Income from the endowment provides an annual scholarship to a freshman student who has achieved high academic grades in secondary school, who has demonstrated leadership qualities, has good character, and requires financial assistance.

George R. Weppler Memorial Scholarship Award. Established by a gift of the Harvey Hubbell Foundation in memory of George R. Weppler, a Trustee of the University of Bridgeport. The annual income is used for Engineering scholarships.

Alfred R. Wolff Scholarship. To be awarded to applicants or students in financial need whose academic record and personal qualities show a potential for success in a helping or social service. First consideration will be given to applicants in the Counseling and Human Resources Department, who have specific, significant, and/or limiting physical disabilities.

OTHER SCHOLARSHIPS

The Dr. E. H. Arnold Alumni Scholarship. Awarded to a student registered in the Arnold College Division who has exemplified high scholarship, leadership, and character, and is in need of financial assistance.

Allan M. Chanales Memorial Scholarship. Established by the TRW Corporation for the benefit of a student in Computer Engineering.

The Chesebrough-Pond's Inc., Scholarship. Provides full tuition to a student majoring in Science and entering the senior year.

Connecticut Society of Certified Public Accountants. Provides for two $500 scholarships. One recipient must hold junior status and one senior status; both recipients must major in Accounting. The students being considered for the scholarships will have their names submitted to the Accounting Department for approval.

The Fones Alumnae Scholarship. Supported by the alumnae of the School of Dental Hygiene, provides an award of $100 each year for a deserving student in either the two or four-year Dental Hygiene program.

The Ronald A. Malony Scholarship. Created by the Southern Connecticut Gas Company with preference to an academically qualified and financially needy student from the greater Bridgeport area. Mr. Malony was a former Chairman of the Board of the Southern Connecticut Gas Company and longtime Secretary of the University of Bridgeport Board of Trustees.

The Charles E. Reed Scholarship Award. Established by the Board of Trustees of the University of Bridgeport to honor Dr. Charles E. Reed for his distinguished leadership as Chairman of the Board from 1978 through 1983, and in recognition of his outstanding contributions to the field of science. The award will be presented annually to an undergraduate student who has achieved the highest level of excellence in scientific and/or engineering studies at the University of Bridgeport.

AWARDS AND PRIZES

The Altrusa Club of Bridgeport, Connecticut District 1 Award. Made annually to a senior woman in Business who has demonstrated the highest potential for success in her chosen field and is recommended by her Department Chairman.

Alumni Association Award. The $100 award is given annually by the Alumni Association to an outstanding freshman scholar.

The Bridgeport Dental Association Grant/Award. Given each year by the Bridgeport Dental Association, with the annual approval of its Board of Directors, to a freshman student entering the Fones School of Dental Hygiene who demonstrates financial need and resides within the six town, Greater Bridgeport region. This region includes the City of Bridgeport and the towns of Easton, Fairfield, Monroe, Stratford and Trumbull.

This $1,000 award is to be used to purchase the student's required instrument kit and text books.

The recipient will be identified by the Office of Financial Aid and selected in consultation with the Director and faculty of the School of Dental Hygiene. In the event that more than one candidate is eligible for this award, the final determinant will be the highest grade average upon entrance.

Dr. E.H. Arnold Memorial Award. Presented each year to the male and female seniors of the Arnold Division who best exemplify the characteristics in which Dr. Arnold firmly believed. The recipients receive a key and their names placed on a plaque which is retained by and displayed at the University.

Kappa Omega Epsilon Service Award. The award and certificate is presented annually to at least one part-time student who has demonstrated a record of service to fellow students, Metropolitan College part-time studies program, the University of Bridgeport and the community.

The James Borona Memorial Scenic Art Award. Established by Helen Borona, whose husband's craftsmanship and art were an inspiration to students. The award is presented annually to a student of Scenic Art, on the basis of talent, devotion, financial need and dedication to craftsmanship.

The Elizabeth Carrozza Memorial Award. Established by alumnae of the Fones School of Dental Hygiene in memory of Elizabeth Carrozza, a 1963 graduate of Fones School, who lost her life in a tragic automobile accident in 1967. An annual award is made to a Fones student who has shown outstanding achievement in clinical work.

The Otto W. Heise Science Award is to be awarded annually to a junior or senior majoring in science. First choice will be given to a student residing in Newtown, second choice to a student residing in Fairfield County, and a final choice to a student residing in Connecticut.

The Robert W. McDowall Memorial Award. Annual award for a deserving student in the Business Division of the School of Business or the School of Science, Engineering, or Technology, contributed by Mr. and Mrs. George Mezzanotte.

The Horace B. Merwin Award. The income is awarded annually to a graduating senior in the Business Division of the School of Business and the School of Science, Engineering and Technology who has demonstrated qualities of leadership in University activities, has maintained good academic standing, and has evidenced high ethical standards. The award is a memorial to the late Horace B. Merwin, trustee.

Milton Millhauser Prize in Fiction Writing. Awarded bi-annually in honor of Professor Millhauser who taught at the University of Bridgeport from 1947-1975.

The Molly Schermer Award. Given annually in her memory by her son, A.J. Schermer, to a graduating senior in Business or Engineering who, in the opinion of a faculty committee has substantially contributed to the community by effective participation in religious, civic, or health and welfare activities.

Graduate Scholarships

Applications are available in January of each year for the following year's graduate scholarships.

SCHOOL OF BUSINESS & SCHOOL OF SCIENCE, ENGINEERING AND TECHNOLOGY

Iris L. Bresky Memorial Scholarship offers support for students in HISP program. First preference is to an Argentine student majoring in Computer Engineering or Business Administration.

The Francis X. DiLeo Memorial Scholarship Fund was established by alumni, faculty and friends of the late Dean Francis X. DiLeo. Income from this fund provides partial scholarship awards to deserving students on the basis of academic excellence and leadership.

SCHOOL OF EDUCATION AND HUMAN RESOURCES

The Drs. Louise and Anthony Soares Scholarship in Teacher Education is awarded annually, with first preference given to a graduating senior at the University of Bridgeport wishing to pursue a teaching certification or a master's degree in Education at UB. If that person is not available, the scholarship may be awarded to a student at the graduate level who has achieved a 3.0 QPR on an undergraduate basis and has financial need.

The Augusta Silverstone Memorial Scholarship. Given by her sister, Minnie Silverstone, in recognition of Augusta's contributions as an educator and counselor with the Bridgeport Board of Education. Income will be awarded as financial aid to a graduate student in either the School of Education or the School or Counseling and Human Resources. First preference is to be given to students who have come through or plan to work within the Bridgeport school system.

The Nancy Lazarus Memorial Scholarship Fund was established in 1970 by Mr. and Mrs. Rudolph G. Lazarus in loving memory of their daughter, Nancy, a graduate of the University. Preference is given to a full-time graduate student majoring in Guidance and Counseling.

Alfred R. Wolff Scholarship is awarded to applicants or students in financial need whose academic record and personal qualities show a potential for success in helping or social service. First consideration will be given to applicants in the Division of Counseling and Human Resources, who have specific, significant, and/or limiting physical disabilities.

HALSEY INTERNATIONAL GRADUATE SCHOLARSHIP PROGRAM

Halsey International Graduate Scholarship Program was established in 1967, with the creation of the Lal Bahadur Shastri Scholarship for a graduate student from India. The late Dr. James H. Halsey, and his wife, Julia, instituted the International Scholarship Program at the University of Bridgeport. Established to enrich educational and cultural relationships between the local community and countries of the world, and foster international understanding, the program awards scholarships to international students to study at the University of Bridgeport in a graduate program leading to a Master's degree.

Supported by people sharing ethnic heritage and individuals interested in the culture of a country, committees work to raise funds each year to pay the tuition for their scholars. The fund raising projects range from benefit programs of colorful ethnic flavor, festivals and holiday celebrations, to individual contributions.

The following are International Graduate Scholarship Committees:

- The Argentine Graduate Scholarship Committee
- The Chinese Graduate Scholarship Committee
- The French Graduate Scholarship Committee
- The German Graduate Scholarship Committee
- The Greek Graduate Scholarship Committee
- The Hungarian Graduate Scholarship Committee
- The Shastri Graduate Scholarship Committee (Shastri Memorial for a student from India)
- The Israeli Graduate Scholarship Committee
- The Italian Graduate Scholarship Committee
- The Japanese Graduate Scholarship Committee
- The Polish Graduate Scholarship Committee
- The Portuguese Graduate Scholarship Committee
- The Scandinavian Graduate Scholarship Committee (includes Denmark, Finland, Iceland, Norway, Sweden)

A most rewarding aspect of the program is that each student lives with different host families at no cost to the student. Transportation for the students to and from their host families and the University is provided daily by the Halsey International Scholarship Program.

Applicants must meet all requirements for admission to a graduate program as full-time matriculated students. They must also pass the tests appropriate to the various disciplines; GMAT (Graduate Management Admissions Test); GRE (Graduate Record Examination); and TOEFL (Test of English as a Foreign Language) for which a score of 575 must be achieved by all those whose first language is other than English, or the equivalent in other tests.

Highly competitive international scholarships are awarded each year to students from the countries represented by the various committees in the program. The scholars must have demonstrated outstanding scholastic ability and possess the special qualities that will make them goodwill ambassadors while they are in the United States participating in the program and upon returning home.

In many cases, the scholarship includes payment of all educational expenses for one year of graduate studies and is open to single persons between 20-30 years of age. Students living abroad may apply through the Fulbright Commission offices in their countries, the Institute of International Education, other designated educational agencies, or to the University of Bridgeport Halsey International Scholarship program.

As each scholarship may vary from year to year it is advisable to inquire regarding the scholarship of the specific country where you reside.

A professionally staffed office, located on campus, provides guidance and assistance in all aspects of the Halsey International Scholarship Program.

The Core Curriculum

Chair Core Commission: Wilson Kimnach
Rennell Hall
(203) 576-4300

The Core Curriculum represents a coherent set of courses that provides students with a foundation for the knowledge, the perspectives, and the verbal, quantitative, reasoning and communication skills that will enable them to become life-long learners and to function as contributing members of the world community in the 21st century. The Core Curriculum goal is to ensure that University of Bridgeport graduates possess both the skills and knowledge to be culturally literate.

The Core Curriculum consists of three sections: *Skills,* generally taken in the freshman year; *Heritage,* taken in the sophomore and junior years; and a *Capstone Seminar,* taken in the senior year. The Core Curriculum offers to all undergraduate students at the University of Bridgeport a challenging collegiate learning experience.

I. THE SKILLS SECTION

In the freshman year, the Core Curriculum places emphasis on the development of basic communication (writing, reading, speaking and listening) and computing skills. Accordingly, freshman-year requirements are English C101 and either passing a standard mathematics competency examination or completing Mathematics C105 or a higher numbered mathematics course.

II. THE HERITAGE SECTION

The Core Heritage courses are intended to help students to continue to develop basic communication and thinking skills in the context of rich content courses that engage students intellectually in the broader concerns of society, environment, science, technology and the humanities and arts.

The Heritage Core Courses are generally interdisciplinary in method and content and accordingly are often taught by a team of faculty from diverse disciplines. In addition to lectures the Heritage courses meet for weekly seminar discussions led by a faculty member. The Heritage section requirements are Social Sciences (6 hours); Natural Sciences (6 hours); Humanities (6 hours); Integrated Studies (3 hours); and Fine Arts (3 hours).

III. THE CAPSTONE SEMINAR

The Capstone Seminar (Capstone 390), a three-credit course that must be taken by all students in their senior year, is the final element of the core curriculum. In order to take advantage of the wide diversity of majors that is distinctive of the University of Bridgeport, the seminars are composed not of students from a single or even related majors, but of a mixture of students representing the richness of perspectives the University offers. The Capstone Seminar consists of two parts, one internal and the other external, which complement each other.

In the internal part, seniors register for one of a number of three-credit seminars, each limited in size, and each taking a particular approach to a general theme — which in the past included such topics as *"Revolution"* and *"Man & Nature."* All students are expected to plan, present, and defend a point of view which, itself, may form the basis of a 15-20 page research paper.

In the external part, all Capstone seminars meet twice a year in joint session to hear a guest speaker address a topic arising from the general theme. Speakers are selected for their renown and for their ability to add to the ideas under evaluation in the various seminars. They are encouraged to be forthright, even controversial, and time is set aside for them to answer questions from the audience.

All-University Core Curriculum 1997 - 1998

A core curriculum of 33 semester hours is required as part of every undergraduate degree program. Courses acceptable for fulfilling core requirements are designated by the University Core Curriculum Commission.

I. SKILLS SECTION

(6 SEMESTER HOURS)

A. ENGLISH COMPOSITION

English C101 (Basic Composition and Rhetoric)

B. QUANTITATIVE SKILLS

The mathematics skills requirement in the core curriculum will be met in either of two ways:

1. By passing the math-competency test with a satisfactory score (as defined by the Department of Mathematics). This test will be given to all entering students.
2. By passing Math C105 or a higher-numbered math course.

NOTE: The requirements in the Skills Section may be met by passing suitable competency examinations, but the student will not receive academic credit for passing those exams.

II. HERITAGE SECTION

(24 SEMESTER HOURS)

To satisfy the Heritage Section of the Core Curriculum students must take the following courses:

A. Humanities: C201/C202
B. Fine Arts: C101
C. Social Science: C201, C202
D. Natural Sciences: C101, C102
E. Integrated Studies Elective

III. CAPSTONE SEMINAR

(3 SEMESTER HOURS)

The Capstone seminars are open only to seniors, all of whom must register for one of the Seminars to fulfill the requirements of the Core Curriculum.

Prerequisites: Students must have earned a minimum of 90 semester hours, passed English C101 and completed 12 hours in the Humanities and Social Sciences Heritage section of the university Core Curriculum. The Capstone Writing Prize ($150) is awarded each semester by the Capstone faculty to the paper which best meets the standards of the Capstone in research and analysis and in content and presentation. The winning paper is bound and shelved in the Wahlstrom Library.

Academic Resource Services

Academic Resource Center
Co-Director: Roxie Ray
Co-Director: Marianne Tecun
Halsey House
491 University Avenue
Bridgeport, CT 06601
(203) 576-4290

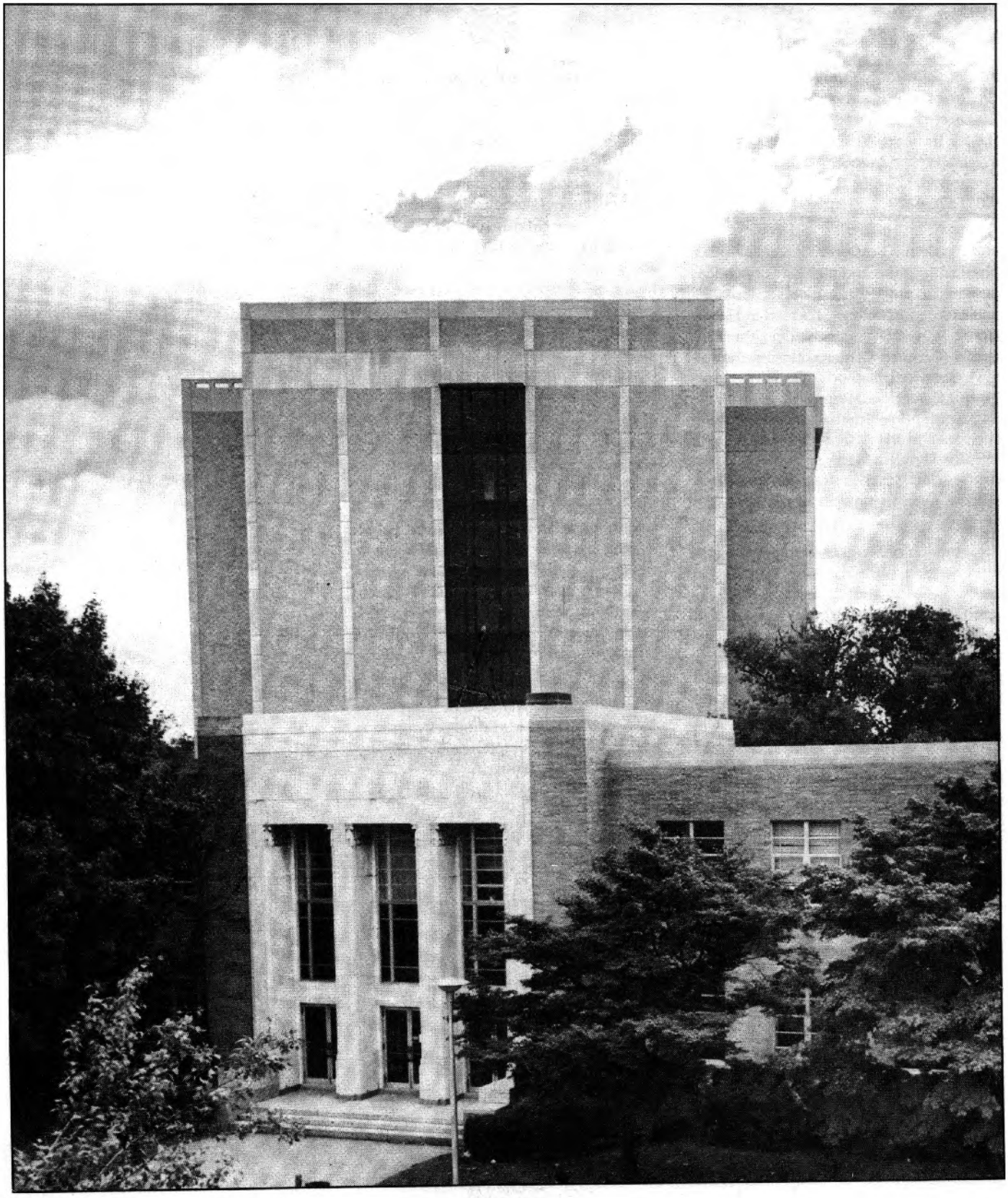
The Academic Resource Center is both a physical location and a cluster of services designed to empower students so that they will succeed in college. Located in Halsey House, 491 University Avenue, the Academic Resource Center sponsors the following services: Methods of Inquiry course, Tutoring Services, Remedial Assistance, Supplementary Instruction, Freshman Services and ESL Workshops. Methods of Inquiry (English 115) is a three credit course which teaches strategies for college success to entering and upper-class students.

Each section of Methods of Inquiry meets twice weekly, once in a 50 minute session and once in a double session. Students learn ways to ensure their success in college courses by exploring various strategies to enhance reading, test-taking, note-taking, critical thinking and study skills. Tutoring Services are available at the Academic Resource Center to individual students at no cost. Where numbers of students seeking help in one area warrant it, small study groups are arranged with the Academic Resource Center acting as facilitator.

Remedial Assistance is available to all students on either a regularly scheduled or drop-in basis. Freshman Services are delivered by the directors, teaching interns, work-study students, and volunteers who staff the Academic Resource Center. The teaching interns attend many typical Freshman classes (Math 100, English 100, English 100I, English 101I, Psychology 103) and keep the lines of communication open to the professors of these courses. This level of communication allows the teaching interns to have knowledge of the content of the courses being taught and the objectives of the professors, both of which improve their ability to assist the student.

Similarly, the staff of the Academic Resource Center works closely with the General Studies Program in supporting its students and professors. Supplemental Instruction is a program for students at all levels in the University who are experiencing academic difficulty. Students who achieve less than a Grade Point Average of 2.0 in a given semester are advised to visi t the Academic Resource Center for a weekly meeting with an advisor and for weekly tutorial sessions.

Three workshops have been developed to assist students whose first language is not English. These workshops offer instruction in Reading Comprehension, Writing, and English Conversation.



Schools and Professional Programs

College of Graduate and Undergraduate Studies

Vice Provost and Dean
Anthony J. Guerra
Bryant Hall
(203) 576-4662

The College of Graduate and Undergraduate Studies (CGUS) houses five schools: the School of Business; the School of Education and Human Resources; the School of General Studies; the School of Arts, Humanities and Social Sciences; and the School of Science, Engineering and Technology. In addition, the Honors College, the Institute for the Study of Values and Ethics, and The New England Center for International and Regional Studies, are part of CGUS. The widely diverse faculty is united by the shared commitment to educational excellence and the search for truth. CGUS seeks throughout its programs to educate students to become effective world leaders in urban centers. The College works to help its students find appropriate internships and Co-op Placement to enhance their educational experience.

Undergraduate Studies

The College offers to its students an impressive array of degree programs spanning engineering, biology, mathematics, social sciences and humanities. All Bachelor degree students are required to take at least 40 semester hours of general education to be fulfilled through the University Core Curriculum which is designed to ensure that UB students will graduate achieving competence in reading, writing, thinking and quantitative skills. The College recommends that all students take at least one basic course in business and one in technology, in addition to the arts, humanities and social sciences course requirements offered through the Core Curriculum. A number of interdisciplinary and unique double majors are possible through CGUS.

Graduate Studies

The College offers to its students graduate degree and certificate programs in engineering, education, human services and business. The goal of these degree programs is to graduate students who are competent professionals able to carry out their duties in a socially responsible manner.

School of Business

Director: Glenn Bassett
M.B.A. Program Director:
Llewellyn M. Mullings
Undergraduate Advisor:
William Greenspan

Faculty: Albert, Bassett, Brady, Choi, Chung, Coppolella, Greenspan, Kim, Moriya, Mullings, Rigia, Schaff, Schenkerman, Todd, Tong

Accreditation

All degree programs in the School of Business are licensed and accredited by the State of Connecticut Department of Higher Education and the New England Association of Schools and Colleges. In addition, the School of Business is nationally accredited by the Association of Collegiate Business Schools and Programs to offer specified graduate and undergraduate business degrees. National accreditation covers the Bachelor of Science (BS) degrees in Accounting, Business Administration, Business Economics, Computer Applications and Information Systems, Finance, International Business Management, and Industrial Relations, and Marketing. At the graduate level accreditation applies to the Master of Business Administration (MBA) degree with concentrations in Accounting, Finance, General Administration, International Business, Management and Industrial Relations, Management Information Systems and Marketing.

UNDERGRADUATE DEGREE PROGRAMS

Accounting (B.S.)
Business Administration (A.A., B.S.)
Business Administration/
Legal Administration (B.S.)
Computer Applications and Information Systems (B.S.)
Fashion Merchandising (A.A., B.S.)
Finance (B.S.)
International Business (B.S.)
Legal Assistant (A.A.)
Management and Industrial Relations (B.S.)
Marketing (B.S.)

Mission Statement

The School of Business degree programs prepare graduates for positions of leadership and responsibility in our dynamic world environment.

Emanating from the mission statement, the School of Business sets three specific educational objectives to achieve: (1) to teach state of the art business skills and knowledge to a multinational student body; (2) to engage in scholarly and professional activity so as to make significant intellectual contributions to the field of business; and (3), to provide service to the business and civic community in order to improve their management processes and the quality of life.

The goal of the School of Business is to provide students with practical knowledge and skills in business as well as a sound theoretical foundation. Most members of the business faculty have had considerable business experience which makes them invaluable assets in guiding the student's choice of career.

In most courses offered in the School of Business, a set of business ethics and values is discussed in order to help the students develop a perspective on the proper role of business in society and ethical conduct of behavior.

Internship Program

The School of Business requires all eligible students to gain practical experience before completion of the degree. The student can fulfill this requirement by participation in the internship program with several research and consulting institutes established in the School of Business or with outside business firms, non-profit organizations, government agencies, and international organizations.

Admission Criteria and Procedures

A student is admitted to the School of Business through an evaluation of the high school transcript, class rank, and SAT scores based on the determination that the student has demonstrated potential in analytical reasoning, comprehension and expression in words and creative power in thinking.

Our past experience has shown that to be able to perform well in the Business Program, a student has earned a 2.5 G.P.A. in high school, above 1010 SAT, ranked in the top half of the class, achieved "B" or better grades in Math and English, and good recommendations from the high school counselor.

Students transferring from undergraduate majors of other colleges must have a minimum quality point ratio of 2.5.

For information concerning the admission procedures, please refer to the section on University Admissions.

GRADUATE DEGREE PROGRAMS

Master of Business Administration (M.B.A.)

The M.B.A. degree is offered for full-time or part-time study in a traditional or weekend format. Specific course requirements for the degree will provide students with a strong educational background. Students with a recent Bachelor's degree and a good academic average at an accredited business college may be able to complete the M.B.A. with 30 semester hours of advanced study. Students with a Bachelor's degree in a non-business field generally require 54 semester hours to complete the M.B.A.

Mission Statement

The Master of Business Administration (M.B.A.) in General Administration at the University of Bridgeport develops effective and responsible leaders for business, industry, and government. Because the University of Bridgeport is located near the center of one of the nation's major concentrations of corporate headquarters, our faculty and students will be a significant regional resource. Because businesses in this region are truly multinational, the

M.B.A. curriculum encourages a global perspective.

To this end, the M.B.A. program at UB not only emphasizes traditional management skills but also stresses the technical and cultural preparation necessary to understand the increasingly complex international environment. In accomplishing this goal, teaching methods will include a mix of lecture, case study, experiential learning, and analysis of international socio- political issues.

Graduates of the University's M.B.A. program will have the analytic and interpersonal skills to be effective leaders: they will be responsible leaders because they will have learned how to employ these skills to improve their communities as well as their companies.

Prerequisites, Criteria and Procedures

The applicant must present an appropriate baccalaureate degree from an accredited institution of higher education. Official transcripts of all previous work must be sent to the Office of Graduate Admissions.

No specific undergraduate curriculum is expected or preferred before entry to M.B.A. study. As a professional program the M.B.A. is designed to build upon undergraduate study in the arts, humanities, science, engineering or other curricula. Students without prior study of college mathematics to the level of calculus (Math 106) or with little experience with computers will be required to register for appropriate additional coursework in their first year of study.

New classes are admitted each fall and spring for full-time or part-time study. Summer course offerings also allow new admissions for part-time study. Full-time students may begin in summer for any remediation study, to ease their course load during the regular semesters, and in some cases to accelerate their study program.

Applications and supporting credentials for full-time students should normally be submitted at least two months before the desired starting time, and for part-time students at least one month.

Graduate Management Admission Test (GMAT and TOEFL)

The GMAT is designed to measure aptitude for graduate study. It is not a test for knowledge in specific business subjects. The test is given four times a year in the United States and some foreign countries. It is administered to prospective students three times a year at the University of Bridgeport. Application forms may be obtained from the Office of the Director of the M.B.A. or by writing directly to GMAT, Educational Testing Service, Box 966, Princeton, New Jersey, U.S.A. 08540.

Applicants whose principal language is not English must also take the Test of English as a Foreign Language (TOEFL). Students scoring below 575 will be retested upon arrival at the University and may be required to complete a portion of the University of Bridgeport's Intensive English Language Program. Information about TOEFL may be obtained from TOEFL, Educational Testing Service, Princeton, New Jersey, U.S.A. 08540.

Admission to the School of Business

Candidates for admission to the graduate program of the School of Business must present the following for review:

1. Bachelor's degree from an accredited institution or a recognized international institution in any discipline.
2. Graduate Management Admissions Test (GMAT)
3. Two letters of recommendation.
4. Admission required prior to the start of classes.
5. 3.0 recommended grade point average.

Requirements for Graduation

To qualify for the degree of Master of Business Administration, a student must fulfill the following minimum requirements:

1. Admitted to candidacy for the degree in the School of Business.
2. Satisfactorily complete all subject requirements in the program with an average grade of "B" or better (3.0 QPR).
3. File an application for the degree at the Records Office by the date published in the University Academic Calendar.
4. Complete all requirements within five years from the date of first graduate registration, unless a petition for extension of time is granted.

Scholastic Standards

Students are expected to maintain a 3.0 average. A student whose QPR drops below 3.0 will be placed on scholastic probation and may be dropped from the program unless a 3.0 average is achieved within the next 9 semester hours or unless substantial improvement is demonstrated in the semester following probation.

Grading Policy

Passing grades for graduate study range from A to C-. Any work below C- will be assigned an F. Incomplete work (I grade) must be completed within a year or it becomes an F. To continue in the M.B.A. program, a student should attempt to repeat immediately a course in which an F was received. In computing QPR, the grade from the first repeat of a course replaces the original grade.

Grades from transfer or waiver credits and from non-M.B.A. or undergraduate courses taken after the beginning of the program are excluded from QPR calculations.

Graduate Assistantships

Research assistantships are available on a competitive basis for outstanding full-time students. Graduate assistants may earn as many as nine semester hours a semester, and their eligibility is reviewed each semester. Full-time assistantships require the recipient to work with faculty in the College for 20 hours a week during each semester, and 15 hours a week during the summer term.

Scholarships and Awards

The James E. and Madeline M. Allen Scholarship Fund was established by James E. and Madeline M. Allen, alumni of the University. Income from the endowment provides an annual award to a deserving student in the Graduate Business Degree Program. Preference is given, respectively, to Brazilian, Latin American and United States students.

The Erwin S. Robinson, Jr. Memorial Fund was established by Mrs. Erwin S. Robinson. A male graduate student of the School of Business in need of financial assistance may be presented with an amount not to exceed $500. The award may be made annually.

The Director's Award is a certificate presented annually to the top-ranking Master of Business Administration graduate.

The Francis X. DiLeo Memorial Scholarship Fund was established by alumni, faculty and friends of the late Dean Francis X. DiLeo. Income from this fund provides partial scholarship awards to deserving students on the basis of academic excellence and leadership.

M.B.A./Management Engineering

M.B.A./Management Engineering courses offered by the College of Engineering are available for application to the M.B.A. degree. Specific courses for this study are selected and approved by the student's faculty advisor and the Director of the M.B.A. program.

Advisory Council and Faculty Fellows

Two groups of leading individuals, the Advisory Council and the Faculty Fellows, have been especially active in working with the School of Business.

ADVISORY COUNCIL

The Business School Advisory Council is composed of distinguished local business leaders. It offers opportunity for exchange of perspectives and knowledge between the University and the Business Community. A variety of ways are employed to achieve this end including periodic formal meetings that expose the work of faculty and students to the Council, on-site visits of faculty and students to member facilities, provision of opportunity for co-op student employment and internship, participation by council members as speakers in appropriate classes, as well as participation by council members in the evaluation of curriculum and teaching methods. The council is also called on from time to time to help develop and evaluate programs for the broader business community under the umbrella of the University's Trefz Foundation and its Center for Venture Management.

Current members of the Council include David Bodine, CEO, Bodine Corporation; Jim Tomchick, CEO, Beardsley, Brown and Bassett; Ron Sharp, Partner, Pullman & Comley; Mike Roer, CEO, The Bridgeport Innovation Center; Chuck Matteson, CEO, Boomerang, Intl.; Bob McCloud, CEO, Connect-On-Line; Jim Carbone, CEO, Modern Plastics Corporation; Tony Ruscito, CEO, Devar, Inc.; Robert Thomas, CEO, William B. Meyer, Inc.; John Morgan, CEO, Seymour-Sheridan, Inc.; Ann Stoddard, CEO, The Country Mouse; Dean Hottle, Director of Taxation, Service American Corporation; Richard Morris, CFO, Bridgeport Hospital; Walter Lazarcheck, CFO, Bridgeport Machines, Inc.

FACULTY FELLOWS

Faculty Fellows are recognized in their particular fields, holding significant positions in business and management-related professions. The Faculty Fellows have had an active role in working with students as guest lecturers and in meetings with large or small groups of students. This provides a strong supplement to the student's formal education, helping bring real world problems into the classroom. Individuals who have served as Faculty Fellows include: Drummond C. Bell, chairman, National Distillers & Chemical Corporation; H. Kurt Blumberg, chairman, Irwin Industries; Alan W. Drew, vice chairman, Peabody International Corporation; S. Robert Breitbarth, president, General Cable International, Inc.; George R. Dunbar, general manager, Circuit Devices Division, Westinghouse Electric Corporation; Leandro P. Rizzuto, chairman and president, Conair Corporation; George W. Harvey, chairman, president, CEO, Pitney Bowes Inc.; Betty Hollander, chairman and chief executive officer, Omega Engineering Inc.; Roger M. Keefe, chairman of the Executive Committee, Connecticut Bank and Trust Corporation; Victor K. Kiam, II, president and chief executive officer, Remington Products Inc.; Robert H. Sorenson, president and chairman of the Board, the Perkin-Elmer Corporation; and John W. Wright, president, Wright Investors Service.

School of Education and Human Resources

School of Education and Human Resources
Dean: Vacant
South Hall
(203) 576-4198

Division of Education
Director: Allen Cook
South Hall
(203) 576-4198

Division of Educational Administration
Director: James T. Hamilton
South Hall
(203) 576-4198

Division of Counseling & Human Resources
Director: Joseph E. Nechasek
South Hall
(203) 576-4175

Faculty: A. Cook, J. Cook, Hamilton, Harper, Kirschmann, Mulcahy, Mulcahy-Ernt, Nechasek, D. Phillips, L. Phillips, Soares, Speck, Thomas

Mission Statement

The School of Education and Human Resources is dedicated to providing its students with the opportunity to become educated, productive, and morally concerned citizens of their city, country, and the world. To serve these ends, the School offers an array of professional programs designed to prepare students for careers and leadership positions in education and in human services. The School recognizes a specific obligation to feature training and experiences central to preparing students to respond effectively to the fundamental needs of the cities of Connecticut and the region.

Consistent with and supportive of the increasing national demand for better schools, the Division of Education has accredited programs which provide for the training of highly effective classroom teachers, options for students interested in teaching careers and incentives for better students to enter the teaching profession.

In pursuit of its objectives, the Division of Education considers three requirements to be basic: a broad cultural background, intensive study in one particular field of knowledge, and professional training. To plan, conduct, and evaluate its program, the Division draws on many resources of the University.

Through professional training and field experiences, the student gains solid knowledge of educational objectives; of school curricula, organization, and activities; of the nature of the learner and the learning process; and of the evaluation outcomes.

The Division of Counseling and Human Resources develops, coordinates, monitors and implements a wide range of learning opportunities and services for persons interested in entering the human services field. Current programs within the division include: Gerontology, Human Services, Center for the Study of Aging and the Institute for Addiction Studies. Significant learning opportunities are constantly being developed to meet changing needs in the field of human services.

Accreditation

All degree programs in the School of Education and Human Resources are licensed and accredited by the Connecticut Board of Governors for Higher Education and the Commission on Institutions of Higher Education, New England Association of Schools and Colleges, Inc. The certification programs in Education are accredited by the Connecticut State Department of Education.

Admission Criteria and Procedures

The General Admission policy and procedures for the University of Bridgeport are found in the chapter on Admissions. Admissions to certification programs requires a 2.75 grade point average and passage of PRAXIS I.

UNDERGRADUATE SCHOOL

The School of Education and Human Resources encompasses programs that prepare students to assume careers in human services and in education.

The undergraduate school offers a major in Human Services and a minor in education.

Undergraduate Degree Programs

Division of Counseling and Human Resources
- Human Services (B.S.)

Division of Education
- Minor in Education

GRADUATE SCHOOL

The School of Education and Human Resources offers programs which lead to Master's Degrees in Counseling and Education (M.S.). Sixth Year degrees are offered in Counseling, Elementary Education, and Secondary Education. A Sixth Year Diploma is offered in Educational Administration and Supervision. A Doctoral Degree (Ed.D.) is offered in Educational Leadership.

Certification tracks are available in designated programs that lead to State licenses in teaching and administration. These certifications may be pursued simultaneously with the degrees.

Programs in the School of Education and Human Resources combine the practical needs of professional training with the theoretical grounding necessary for persons interested in quality preparation for leadership roles in their careers. The advanced degrees and the certifications open the doors to a range of career possibilities within traditional counseling and educational institutions, as well as in developing allied fields.

The Doctorate, in particular, leads to advancement in public services and businesses that value a combination of management and people skills.

Admission Requirements

Candidates for admission to the graduate programs of the School of Education and Human Resources must present the following for review:

SCHOOL OF EDUCATION AND HUMAN RESOURCES

COUNSELING AND HUMAN RESOURCES

A. Bachelor's degree from an accredited institution or a recognized international institution with a minimum of 12 credit hours in social/behavioral sciences.

B. 2.5 recommended grade point average.

C. Supplemental application.

D. Two letters of recommendation.

EDUCATION

A. Bachelor's degree from an accredited institution or a recognized international institution.

B. Two letters of recommendation.

C. B- recommended grade point average.

D. Candidates seeking state certification must pass the PRAXIS I exam or secure a waiver based on the SAT of 1000 (at least 400 on verbal and 400 on quantitative), or 1100 if taken after 1995.

EDUCATIONAL MANAGEMENT

A. A completed master's degree from an accredited institution.

B. GRE or Miller Analogies Test scores.

C. Personal statement that includes: reason for interest in doctoral program; description of personal and professional accomplishments.

D. Two letters of recommendation.

E. Demonstrated scholarship in the area of management.

Graduate Degree Programs

Counseling and Human Resources (M.S.)
- Agency Counseling
- Human Resource Development

Counseling (6th year)

Education (M.S.)

Educational Administration and Supervision (6th year)

Educational Leadership (Ed.D.)

Elementary Education (6th year)

Secondary Education (6th year)

Teacher Certification

The university maintains an accredited Teacher Certification Program for Elementary level (K-6); Middle grades (4-8); and Secondary grades (7-12) in Biology, Business, Chemistry, Earth Science, English, Mathematics, History and Social Studies; and Music (K-12); and Intermediate Administrators.

For more information, please contact the Education Department at (203) 576-4198.

Registration Procedures

Students may register by mail two months prior to the opening of each semester. Mail registration forms are available from the Office of the Registrar, Wahlstrom Library, 126 Park Avenue, Bridgeport, CT 06601. A new student may use the mail registration procedure only upon inclusion of a permit card issued by the Office of Graduate Admission. Registration in person may be made on the day of the registration indicated on the Academic Calendar. Registration for courses must not be construed as constituting acceptance into a graduate program.

School of General Studies

Director: George Blake
Stratford Hall
(203) 576-4958

Director of the IDEAL Program: Tempe Reith
Stratford Hall
203-576-4828

Degree Programs

General Studies (A.A., A.S.)

Elective Studies (B.E.S.)

IDEAL Program (B.E.S.)
(Accelerated Degree Program for Adults)

Description

The School of General Studies offers programs and degrees for non-traditional students. The University of Bridgeport has a distinguished history of working with these constituencies. The University developed a Basic Studies program for underprepared high school graduates in the early 1970s and currently offers a distinctive accelerated degree program for adults (IDEAL).

Students in the School of General Studies may earn a Bachelor of Elective Studies (B.E.S.) degree in the Elective Studies major and an Associate in Arts (A.A.) or an Associate in Science (A.S.) in the General Studies major.

The IDEAL Adult Degree Program

Many highly motivated adults are prepared for a challenging college experience but must balance school with work and family commitments. At the same time, employers recognize the increased effectiveness of employees who are college trained. To respond to the needs and interests of both individual adults and the business community the University's School of General Studies has developed a special option for part-time undergraduate study. Initiated in 1988, IDEAL (Innovative Degree Excellence in Accelerated Learning) offers individualized degree planning, innovative formats, and a wide range of courses in business and the liberal arts. The IDEAL Program responds to a broad spectrum of educational goals and aspirations. By providing access to specially designed offerings ranging from weekend courses to condensed evening courses, IDEAL offers a variety of learning opportunities for the adult student.

To afford greater access for working students, the program extends the boundaries of the University and offers many of its programs off-campus. University of Bridgeport Stamford Center provides a corporate setting for courses and academic services. In addition, IDEAL offers courses on the Bridgeport campus and at a Trumbull High School.

On the main campus in Bridgeport, IDEAL offices are located in Stratford Hall, a spacious and comfortable residence at 276 Park Avenue.

Part-time Undergraduate Study

IDEAL offers two options to students who wish to pursue college study on a part-time basis.

SPECIAL FORMAT AND WEEKEND COURSES

IDEAL offers full-semester courses in a range of formats. Liberal arts, human services and business courses meet once a week or once every other week on weekday evenings, Saturday mornings or Saturday afternoons. Classes are held in Stamford, Bridgeport and Trumbull. Adult students, age 23 or over, who are preparing to enter accelerated courses, as well as students already enrolled in IDEAL or other University programs, are eligible to enroll in these courses.

ACCELERATED COURSES

IDEAL's accelerated courses are available to adults who have earned at least 21 semester hours. Evening and Saturday classes meet once a week and run for five or ten weeks. IDEAL has eight starting points per calendar year. In addition, weekend courses, independent study and traditional offerings allow students to establish a pace which suits their life situations, and whenever possible, to accelerate progress toward graduation.

Students earn 6-30 semester hours per year through coursework and further accelerate their studies through CLEP tests and credit for life and work experience. IDEAL students pursue the A.S., A.A., or B.E.S. degree through the School of General Studies or they enter the B.S. program offered by the College of Business.

Applications for admission into the IDEAL Program are accepted from those 23 years of age and older with three years of paid or unpaid work experience. Students apply for entrance into the IDEAL Program after attending an information session and meeting with an academic advisor. For information, call 576-4800.

Credit for Life and Work Experience

The Credit for Life and Work Experience Program allows adult students to demonstrate that what they have learned from experience is equivalent to what is taught through specific University courses. IDEAL staff assists students in assembling documentation. Faculty conduct an evaluation of the student's learning which may include a paper, a test or an oral presentation.

College Level Examination Program

Standardized (CLEP) tests from the College Testing Service offer students another means for demonstrating what has been learned from experience or independent reading. These are available monthly through IDEAL.

For assistance with CLEP or CLWEP, please call (203) 576-4800.

Accreditation

All degree programs in the School of General Studies are licensed and accredited by the State of Connecticut Department of Higher Education and the New England Association of Schools and Colleges.

School of Arts, Humanities and Social Sciences

Director: Thomas Juliusburger
Breul Hall, Room 115
(203) 576-4239/4709
Fax: (203) 576-4051

Faculty: Allen, Blake, Carveth, Ganev, Geist, Grant, Guerra, Juliusburger, Justice, Kidde, Kimnach, McCue, McIntyre, Nixon, Piltzecker, Thomas, van der Giessen, Yu

Degree Programs

LIBERAL ARTS STUDIES

Elective Studies (B.E.S.) with concentrations in:
- Humanities
- Social Sciences

Literature and Civilization (B.A.) with concentrations in:
- Creative Writing
- English
- History
- Interdisciplinary Studies
- Philosophy

Mass Communication (B.A.) with concentrations in:
- Advertising
- Communication Studies
- Journalism
- Public Relations

Social Sciences (B.A.) with concentrations in:
- History
- Interdisciplinary Studies
- International Studies
- Political Science
- Psychology
- Sociology

VISUAL & PERFORMANCE STUDIES

Design Arts (B.S.) with majors in:
- Industrial Design
- Interior Design

Music Arts (B.Mus) with concentrations in:
- Jazz Studies
- Music Business
- Music Education
- Music Performance

Visual Arts (B.F.A.) with majors in:
- Graphic Design
- Illustration

Description

The liberal arts disciplines, collectively designated as the Humanities and the Social Sciences, include English, History, Philosophy, Modern Languages, Political Science, Psychology, Sociology, Economics, and aspects of Mass Communication. While these disciplines originated as distinctive approaches to the understanding of ourselves, our history, our social organizations, and our values, they are essentially interdependent. Just as the liberal arts are interdependent, so are the arts disciplines, among themselves and with the liberal arts. To study visual arts, like Graphic Design and Illustration, or design arts like Interior or Industrial Design, or performance arts, like Music and Jazz Studies, is to come to grips with the skills and history relevant to each, and with their interaction over time and place.

The School is committed to interdisciplinary and comparative studies in the liberal arts, which it believes is the approach that best prepares students for the challenges and opportunities of the twenty-first century, and for graduate school. The majors in Humanities and Social Sciences give students a general foundation in the Liberal Arts while, at the same time, examining the connections within and between them. They also permit students to focus on a discipline of their choosing. In the Humanities major one may opt for a concentration in Creative Writing, English, History, or Philosophy. In the Social Sciences major there are concentrations in Political Science, History, International Studies, Psychology, and Sociology. Alternatively, students working closely with their academic advisors may design concentrations in Interdisciplinary Studies which reflect their own interests and career goals.

The School offers an interdisciplinary major in Mass Communication, with concentrations in Journalism, Advertising, Public Relations, and Communication Studies. Students can also opt for a Bachelor of Elective Studies degree, which can be taken with a humanities or social sciences concentration.

The School offers a four year major in Graphic Design, and Illustration. The curriculum takes note of the new realities in the work place and future trends, which give the edge to those who are well-prepared both in the traditional skills and in the new, computer-based technologies.

The School offers a major in Industrial Design. The essence of the program is its recognition that, in an ever more complex world, the creative industrial designer makes things easier to comprehend, safer and more efficient to operate, and more enjoyable to use. The Industrial Design major seeks to prepare designers capable of humanizing technology, and of working with a wide array of assignments from consumer products, business equipment, scientific and medical instruments, transportation, and packaging, to environmental design. The School also offers a major in Interior Design. It is focused on training the professional who is qualified to identify, research and solve problems relating to the function and quality of the interior environment.

Both majors provide the student with a broad base of design education and the opportunity to specialize in areas of interest. Students may work with a number of national manufacturers on collaborative design projects, or undertake field projects of their own under faculty supervision.

The School also provides two years of study in modern languages and culture, both European (French, German, Spanish) and Asian (Japanese, Chinese and Korean). In addition, the School is, to a large extent, the home for those courses in composition, communication, humanities and social sciences mandated by the University's core curriculum, and for the Capstone seminar, which gives seniors in all University programs their final, comprehensive, interdisciplinary experience.

Facilities for Visual & Performance Studies

Five floors of the Arnold Bernhard Center overlooking Long Island Sound, and three floors of adjoining Breul Hall, are occupied by the art, design, and music programs of the School, with additional classroom, performance, and lecture hall space. Individual students have access to spacious studio and practice areas. The University Art Gallery is housed in the Bernhard Center and is available for student exhibitions as well as those of visiting artists. There are facilities for woodworking, plastic forming and metal working, as well as special laboratories for materials study, human factors testing, graphic preparation, photographic processing, studio shooting, printmaking, video post-production, and computer graphics. Most studio courses have a fixed materials fee.

Internships, Co-operative Programs and Professional Opportunities

The School offers students a variety of options dependent on their major interests. In the Humanities, Social Sciences and Mass Communication programs, there are opportunities for internships with state and local government organizations, newsprint and broadcast media, advertising agencies, and related commercial interests. The University's proximity to New York City, the media, art, and design center of the United States, as well as the home of the United Nations, and the site of many museums, foundations and research institutes, offers students an exceptional variety of intellectual, cultural, and professional experiential learning possibilities.

Accreditation

All degree programs in the School of Arts, Humanities and Social Sciences are licensed and accredited by the State of Connecticut Department of Higher Education and the New England Association of Schools and Colleges. In addition, the School is an accredited institutional member of the National Association of Schools of Art and Design.

Admission Criteria and Procedures

A student is admitted to the majors in Humanities, Social Sciences and Mass Communication after an evaluation of the high school transcript, class standing, counselor recommendations, and SAT scores and has demonstrated potential in analytical reasoning, comprehension, verbal expression and intellectual growth.

Our experience indicates that, in order to perform well in the School's programs, and in the University's general education core, students will have at least a 3.0 G.P.A. at high school, a S. A. T. of 1000 or better, be ranked in the top third of class, have achieved 'B' or better grades in English and other Liberal Arts' subjects.

In addition to the standard University requirements, admission to the majors in Design, Music, and Visual Arts may require the submission of a portfolio representing the applicant's creative work, or a tape/video-cassette representing performance skills.

For information concerning admission procedures, please refer to the section on University Admissions.

General Criteria for Degrees from the School of Arts, Humanities and Social Sciences

In the Humanities, Mass Communication, and Social Sciences majors, the Bachelor of Arts degree requires a minimum of 120 semester hours of acceptable work. Thirty to forty-eight semester hours may be devoted to the major, and at least half of these must be completed at the University unless this requirement is waived by the School director. The exact number of semester hours required for each major is listed in the section of the catalog entitled "Undergraduate Degree Programs". Foreign language competency at the 104 level is required.

In Design Arts, the Bachelor of Science degree requires a minimum of 127 semester hours of acceptable work, of which 66 semester hours must be in the major. In Visual Arts, the Bachelor of Fine Arts degree requires a minimum of 125 semester hours of acceptable work, of which 75 semester hours must be in the major. The majors in Design and Visual Arts share a common foundation curriculum during the first two years of study. Individual critiques, with faculty in attendance, are required of majors at the end of each semester. At the end of the second year, a portfolio review establishes whether students have demonstrated their ability to continue in the program. A senior thesis presentation, including professional portfolio development, is required of all Design and Visual Arts graduates of the School.

In Music Arts, the Bachelor of Music degree requires a minimum of 126 semester hours. At the end of each semester, music majors must take an examination in their applied area before a jury of the faculty. At the close of the fourth semester, each music major is given a sophomore review. This review is a comprehensive critique of academic and applied work completed to date and determines whether the candidate continues as a music major.

Foreign language competency is not required of majors in the programs in Design Arts, Music Arts and Visual Arts. However, the School strongly urges foreign language study because acquaintanceship with a second language (and culture) is a priceless asset in the global work environment which will be a dominant feature of the 21st century.

School of Science, Engineering and Technology

School of Science, Engineering and Technology
Director: Steven Malary
Dana Hall
(203) 576-4111

Division of Science and Mathematics
Director: Robert Singletary

Division of Engineering
Director: Stephen Grodzinsky

Faculty: Autouri, Bauer, Dichter, Eigel, Grodzinsky, Hmurcik, Janeff, Kraft, Liu, Lomazzo, Lyon, Mahmood, Malary, Nicholas, Rao, Rho, Romalis-Reytblatt, Santiago, Schile, Singletary, Sobh, Tucci, Yiamouyiannis

Degree Programs

Biology (B.A., B.S.)
Computer Engineering (B.S., M.S.)
Computer Science (B.S., M.S.)
Electrical Engineering (M.S.)
Management Engineering (M.S.)
Mathematics (B.A., B.S.)
Mechanical Engineering (M.S.)

Mission Statement

The School of Science, Engineering, and Technology of the University of Bridgeport provides educational opportunities and serves as a knowledge resource in the sciences, engineering, technology, and mathematics. Our clients are students, the companies that hire them, and various other institutions in Bridgeport and the surrounding region, the United States, and all parts of the world.

Our programs are designed with attention to the institutions we serve. The education we offer features acquisition of fundamental knowledge in a wide range of fields and an application-oriented approach to issues that are progressively more interdisciplinary.

Graduates of our programs possess broad knowledge, professional training, learning skills, and leadership ability that enable their success in an evolving global economy and allow for the betterment of the communities in which they live.

Undergraduate

Engineering can be defined as the profession which applies a knowledge of the mathematical and basic sciences to solve problems for the benefit of mankind. With an eye on the 21st century, the undergraduate program (Computer Engineering) prepares graduates for the practice of engineering at the entry level and the ability to pursue a course of lifelong learning. A secondary aim is to provide a foundation for those interested in and qualified to do graduate studies. The program emphasizes a sound and broad based interdisciplinary technical education, with the integration of the practice of engineering design throughout the curriculum.

The Biology program is designed to prepare students for further study in graduate or professional schools, or for employment in education, industry, or government service. Students may follow a general biology curriculum or elect one of the following options: pre-chiropractic, pre-medicine, pre-dentistry, pre-veterinary, marine biology, ecology or zoology.

Mathematics programs at the University of Bridgeport are designed to prepare the student for graduate work in mathematics and allied areas, industrial employment, secondary school teaching, and careers in the quantitative areas of the biological and social sciences.

Graduate

The graduate offerings of the School of Science, Engineering and Technology are intended for those who wish to enhance their expertise with an emphasis on professional applications.

Accordingly all programs for the Master of Science degree require at least one of the following: comprehensive examination, writing a thesis based on independent research, or completion of an appropriate special project.

Accreditation

All degree programs in the School of Science, Engineering, and Technology are licensed and accredited by the State of Connecticut Department of Higher Education and the New England Association of Schools and Colleges. The Bachelor of Science degree program in Computer Engineering is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

Admission Procedures

For information concerning undergraduate and graduate admission requirements and procedures, please refer to the section on University Admissions.

General Criteria for Degrees from the School of Science, Engineering and Technology

Upon recommendation of the faculty of the School of Science, Engineering and Technology, the University of Bridgeport will award the Bachelor's degree to the student of good character who fulfills the following minimum requirements, in addition to those listed in the chapter on Academic Regulations.

1. Participation in such departmental seminars as the faculty prescribes.
2. Earning the total semester hours required for the individual curriculum as listed in the following pages.
3. Earning a "C-" or better in every course in the major and with a cumulative average of 2.0 in the major courses. Each department designates the courses to be included in the major and decides the procedure necessary to remove each deficiency, including any "D" in a major course. When a course is a prerequisite to another, a "C-" or better in the prerequisite course may also be a requirement. Both B.S. and B.A. degrees are available in Biology and in Mathematics.

Requirements for the Master of Science Degrees

ADMISSIONS REQUIREMENTS

Candidates for admission to the graduate programs of the School of Science, Engineering and Technology must present the following for review.

A. Bachelor of Science degree or its equivalent in Engineering or related applied sciences from an accredited institution or recognized international institution.

B. Two letters of recommendation.

C. 2.8 recommended grade point average.

D. Demonstrated capacity for independent study and the ability to pursue graduate level work.

ACADEMIC PERFORMANCE

Students in a degree program who do not maintain a satisfactory record will be separated from the Graduate School. Normally, the accumulation of one "F" grade, or more than one "D" grade, or more than three "C" grades will result in separation.

COURSE LEVELS

400-499—Open to graduate students and to qualified undergraduates.500-599—Open to graduate students only.

TIME LIMITATION AND PROGRAM CONTINUITY

All requirements for the degree of Master of Science must be completed within six years (twelve consecutive semesters) of the effective start of an approved graduate program of study. Once a program is initiated, the student must maintain continuous enrollment until completion. Under certain circumstances, a student may be granted permission to interrupt his/her program by petitioning the director in writing, stating the underlying circumstances. Program interruption without formal permission will constitute grounds for dismissal from the Graduate School.

DEGREE PROGRAM REQUIREMENTS

All students studying for the Master of Science degree must have on file an approved program of study on the form provided. Programs of study are worked out between the student and his/her advisor to meet both the student's desires and the graduate faculty's philosophy of an integrated program. The program of study must carry the approval of the chair of the department awarding the degree.

Changes in the approved program of study must be approved by the student's program advisor and the department Chair.

GENERAL THESIS REGULATIONS

Students are encouraged to include a thesis investigation in their approved program of study. Accumulation of thesis semester hours and work done during a thesis investigation must be continuous up to the time of its completion. Only those students designated as regular graduate students who have satisfied the following requirements will be permitted to accumulate thesis credits. During the semester prior to that in which the student desires to initiate his/her thesis investigation, he/she must have:

1. Included a thesis investigation in his/her approved program of study;
2. Sought and obtained a member of the graduate faculty who agrees to act as his/her thesis advisor;
3. Submitted a completed thesis investigation form to the department in which the degree is to be awarded;
4. Obtained a Thesis Committee, appointed by the department chair, consisting of three members of the graduate faculty (including the advisor as committee chair).

Students should obtain a copy of "Specifications for Master's Thesis" from the office of the department chair which describes requirements in detail.

All theses in Engineering must be presented at a faculty-graduate seminar. It is the student's responsibility to ensure that this requirement is fulfilled, and that written notice of the presentation is distributed to all interested persons at least one week before the event.

Students who are in the process of completing a thesis are required to register for at least two semester hours of thesis in each semester, including summer, that they actively engage in that activity under faculty guidance. Semester hours thus accumulated that total more than the approved program-of-study requirement are not counted toward the degree.

Upon successful completion of the thesis, and acceptance by the Thesis Committee, provided all other requirements in the program of study are completed, the student becomes eligible for the degree.

Completion of Master's Degree

The Master of Science degree will be awarded only to those students successfully completing the following requirements:

1. A minimum of 30 semester hours with a QPR of "B" or better in an approved program of study. The number of semester hours which may be transferred from another institution is an individual matter that will be reviewed by the major department, but is normally no more than 6 semester hours (8 semester hours in the case of laboratory courses).
2. Satisfactory completion of the state licensure requirements as prescribed by the faculty of the major department, and a favorable recommendation from the faculty upon review of the student's program and performance, after the student has made formal application for a Master's diploma.

   When the degree is completed with a thesis, a minimum of eight courses of three semester hours each are required for the Master of Science degree in Electrical Engineering or Mechanical Engineering. For the Master of Science degree in Management Engineering, nine courses of three semester hours

each plus six semester hours (minimum) of thesis are required; for students holding the Bachelor of Science in Manufacturing Engineering or Industrial Engineering from an approved program, this requirement may be reduced to eight courses of three semester hours each, plus six semester hours (minimum) of thesis.

Cooperative Education Program

The School of Science, Engineering and Technology offers an optional cooperative education program. See the Cooperative Education section of this Catalog for further information.

College of Chiropractic

Dean: Frank Zolli, D.C.

Associate Dean for Academic Affairs: Anthony Onorato, D.C.

(203) 576-4279
75 Linden Avenue

Director of Admissions: Laura Hildreth
(203) 576-4352

Faculty: Galiger, Greenstein,Kane, Khan, Onorato, Perle, Perrault, Paul, Raghuvir, Ross, Scotti, Zolli

Chiropractic is the philosophy, art, and science which concerns itself with the relationship between structure and function of the human body, as that relationship may affect the restoration and preservation of health. The College of Chiropractic prepares students to be primary health care providers. Each student is educated to diagnose, to care for the human body, to understand and relate fundamental scientific information, and to consult with, or refer to other health care providers.

The University of Bridgeport College of Chiropractic is a non-profit, coeducational professional institution which grants the Doctor of Chiropractic (D.C.) degree to graduates who successfully complete four academic years of study including a clinical internship. The program is offered on a full-time basis with no students admitted to a part-time course of study. There are no correspondence courses offered.

Degree

Doctor of Chiropractic (D.C.)

Accreditation & Membership

The University of Bridgeport College of Chiropractic is fully accredited by the Council on Chiropractic Education. Accreditation is a status granted by the Commission on Accreditation of the Council on Chiropractic Education to programs or institutions that have been found to meet the stated Criteria for Accreditation and also to have satisfactorily addressed the program's or institution's mission, goals and objectives. Accreditation entitles programs and institutions to the confidence of the educational community and the public it serves. The College of Chiropractic is also a member of the Association of Chiropractic Colleges.

Mission Statement

The University of Bridgeport College of Chiropractic (UBCC) is an integrated unit of the University of Bridgeport, a private, non-sectarian, comprehensive university. As one of the colleges of the University of Bridgeport, the College of Chiropractic, consistent with the Mission of the University, seeks to: teach and search for new knowledge; to educate men and women of personal integrity and social conscience and to maintain close relationships among faculty, students and community professionals. The primary mission of the UBCC as the first university-based chiropractic college within North America and as the only chiropractic college in New England and the New York City metropolitan region, is to:

Provide a comprehensive, full-time education that prepares qualified candidates to become doctors of chiropractic. This program of study will:

- Present a clinically relevant and integrated basic and clinical sciences curriculum that is rational, research-based, scientific and current in regard to basic sciences, chiropractic principles and practice, and related health sciences,
- Emphasize problem-based and competency assessed pre-clinical and clinical learning,
- Utilize the institutional strengths, resources, and programs of the University,
- Emphasize within its curriculum that:
  - the body is an integrated unit,
  - the body has intrinsic self regulating and healing mechanisms,
    - structure and function are interrelated,
    - the neuromusculoskeletal system can effect the functioning of other body systems and these systems can effect the functioning of the neuromusculoskeletal system, and,
  - diversity and pluralism exist within the chiropractic profession.

Produce graduates who will be competent to practice as portal of entry, primary care, doctors of chiropractic with the following qualities and competencies for the benefit of their patients:

- Knowledgeable in the science, art and principles of the conservative, drugless, non-surgical approach to health-care that is chiropractic,
- Understand the psychomotor and therapeutic effects of the chiropractic adjustment, and be aware of its neurological, physiological and biomechanical effects,
- Knowledgeable of the therapeutic effects and application of physiological therapeutics and nutritional intervention,
- Possess critical thinking skills and thereby be able to assess and incorporate new and relevant treatment and diagnostic methods,
- Practice with a compassionate and humanistic approach,
- Prepare students to attain leadership roles within their communities,
- Possess effective communication and interpersonal skills to facilitate health maintenance and wellness education,
- Embrace strong, ethical values,
- Become a lifelong, self-directed learner,
- Utilize a multidisciplinary and multidimensional approach to diagnosis and patient care,
- Integrate within a multidisciplinary health care team.

Advance chiropractic and its knowledge base through scholarship and

research. To this end the college will:

- Encourage cooperation between the basic and clinical sciences faculties,
- Encourage and support its faculty and students in the pursuit of research,
- Maintain a faculty competent to engage in research and to teach and direct students in research methods, scientific inquiry and critical thinking,
- Support research projects that are relevant to chiropractic practice, education and instructional methods,
- Encourage joint research with other disciplines within the University or by affiliations with other institutions,
- Provide for and encourage the professional development of its faculty,
- Encourage its qualified students and faculty to pursue advanced studies offered by the university,
- Maintain a contemporary collection of library and resource materials to support the program and the research interests of the faculty.

Maintain out-patient clinical facilities which will provide:

- Cost-effective chiropractic patient care services,
- Community service programs,
- Broad-based clinical internships,
- Opportunities for clinical research.

Raise the standards of care of practicing doctors of chiropractic and their staff in our service area by providing:

- Current, continuing education programs,
- A contemporary, chiropractic resource center and services.

Develop within the university a program of recruitment and education designed with College of Chiropractic input:

- For high school graduates: an undergraduate, pre-chiropractic program,
- For college educated candidates: a traditional and accelerated program providing prerequisites for admission to the College of Chiropractic,
- For the University and Bridgeport communities: health services and programs to enhance the health and well-being of each individual,
- For professionals and general public: recruitment and career information, education and research.

Maintain chiropractic as a separate and distinct healing art while integrating chiropractic into the education, research and health-care systems nationwide.

Curriculum

"A Doctor of Chiropractic is a physician whose purpose is to meet the health needs of the public as a member of the healing arts. He/she gives particular attention to the relationship of structural and neurological aspects of the body and is educated in the basic and clinical sciences as well as in related health subjects. Chiropractic science concerns itself with the relationship between structure (primarily the spine), and function (primarily coordinated by the nervous system) of the human body as that relationship may affect the restoration and preservation of health.

"The purpose of his/her professional education is to prepare the doctor of chiropractic as a primary health-care provider; to provide the students with a base of knowledge sufficient for the performance of his or her professional obligations as a doctor of chiropractic. As a portal of entry to the health delivery system, the Doctor of Chiropractic must be well educated to diagnose for chiropractic care, to provide chiropractic care, and to consult with, or refer to, other health care providers as educated." (From: The Council On Chiropractic Education, Standards For Chiropractic Institutions, 1/93).

It is the purpose of the University of Bridgeport College of Chiropractic program to offer as a minimum those courses and objectives as suggested in the CCE standards. It is also the purpose of the UBCC program to offer a broad-based educational experience. In many cases, the educational program presented will go beyond the course offerings suggested by CCE and will also go beyond individual state laws and scope of practice.

The University of Bridgeport College of Chiropractic curriculum is divided into three phases: Basic Sciences, Clinical Sciences, and Clinical Services.

The Basic Science curriculum instructs students in Anatomy, Physiology, Biochemistry, Microbiology, Public Health, and Pathology. These courses are offered primarily during the first two years of a student's education. It is the purpose of this aspect of the program for students to develop an understanding of both normal and abnormal structure and function, homeostatic mechanisms, and to gain a foundation upon which the clinical sciences will be built.

Students from their first semester onward are instructed in the Clinical Sciences. Course offerings include: Chiropractic History, Chiropractic Principles and Practice, Diagnosis, Radiology, Technique Procedures, Nutrition, and Physiological Therapeutics and Rehabilitation Procedures. Students are given in-depth training in the diagnosis and treatment of patients. Practical hands-on training is included beginning in Semester I and continuing to graduation. Information from the basic science curriculum is integrated into the clinical science course offerings and is a foundation upon which the clinical science courses build. Many of the clinical science courses have as a prerequisite successful completion of the basic science courses.

The Clinical Services phase of the curriculum is the last and most important aspect of the UBCC program. Interns at the College's Chiropractic Health Center care for patients under the supervision and direction of licensed doctors of chiropractic. To be eligible for this part of the curriculum, students must be in good academic standing, successfully completed all courses in Semesters I thru VI, and successfully completed the clinic services entrance examination. During the

Clinical Services portion of the program students will continue to receive training in the clinical sciences. They will also continue to be evaluated during their internship in order to remain eligible for clinical services. To continue in Clinical Services, students must remain in good academic standing. Towards the completion of the Clinical Services program students will be administered a clinical competency examination which must be successfully completed prior to graduation.

Because each course is integrated with other course offerings, students should be aware of the prerequisite and corequisite requirements. Throughout the curriculum every effort is made to insure the relevance of information to chiropractic principles and practice. The following is a breakdown, by subject, of the time devoted to each area of study within the curriculum.

Licensure Requirements and Career Opportunities

LICENSURE REQUIREMENTS

The Doctor of Chiropractic degree program offered by the University of Bridgeport College of Chiropractic is accredited by the Council on Chiropractic Education. As indicated in a previous section, the college meets or exceeds the minimum educational requirements suggested by the CCE. Students who receive the Doctor of Chiropractic degree from UBCC are eligible for licensure in all states, Washington, D.C., Puerto Rica, the Canadian Provinces and other foreign countries as regulated by local laws and regulations without restrictions, except for the State of Washington. Licensure in many states require students to complete Parts I, II, III and Physiotherapy examination as offered by the National Board of Chiropractic Examiners (NBCE). Additionally, some states also require that students pass the Part IV Practical Examination offered by the NBCE. Students should contact the NBCE or the Federation of Chiropractic Licensing Boards (FCLB) for additional information pertaining to licensure or the state(s) they wish to practice in. The College maintains a directory published by FCLB in the library as well as within various offices located in the College of Chiropractic. The directory contains information pertaining to licensure and to scope of practice within each state.

CAREER OPPORTUNITIES

Approximately eighty eight percent of the students who have entered the UBCC have completed the requirements for graduation as outlined in this catalog. Most graduates of UBCC go directly into a private practice of their own. Other graduates work as an associate with an experienced doctor or they may rent space within an existing practice.

Semester Based Curriculum

(18 WEEK PROGRAM PER SEMESTER)

YEAR 1

SEMESTER ONE

NUMBER	COURSE	LECTURE	LAB	HRS	SEM HOURS
AN 511	Histology	3	2	90	4
AN 512	Functional Anatomy and Biomechanics I: Spine	3	4	126	5
PP 511	Principles and Practice I: Chiropractic History	2	0	36	2
BC 511	Biochemistry, Metabolism, and Nutrition	3	2	90	4
PP 512	Principles and Practice II: Communication Skills	2	0	36	2
PP 513	Principles and Practice III: Ethics	2	0	36	2
AN 513	General Anatomy I: Viscera	3	3	108	4.5
CH 511	Chiropractic Examination Skills I: Palpation	1	3	72	2.5
AN 514	Embryology I	1	0	18	1
RS 511	Research Methodology/Statistics	2	0	36	2
		22	14	648	29

SEMESTER TWO

DI 521	Diagnostic Imaging I: Normal Anatomy	1	2	54	2
PH 521	Physiology I	2	2	72	3
NS 521	Neuroscience I	2	2	72	3
PP 524	Principles and Practice IV: Subluxation Complex	2	0	36	2
AN 525	General Anatomy II: Head and Neck	3	3	108	4.5
DX 521	Diagnostic Skills I: Case History	1	2	54	2
AN 526	Functional Anatomy and Biomechanics II: Extremities	3	4	126	5
CH 522	Chiropractic Examination Skills II: Palpation	1	4	90	3
AN 527	Embryology II	1	0	18	1
		16	19	630	25.5

YEAR TWO

SEMESTER THREE

NS 612	Neuroscience II	4	2	108	5
PA 611	Fundamentals of Pathology	2	1	54	2.5
PH 612	Physiology II	4	2	108	5
TE 611	Technique Procedures: Soft Tissue	2	2	72	3
TE 612	Technique Procedures: Full Spine	2	2	72	3
DX 612	Diagnostic Skills II: Orthopedics and Neurology	2	4	108	4
DX 613	Diagnostic Skills III: Physical Examination	2	2	72	3
DI 612	Diagnostic Imaging II: Normal Anatomy	1	2	54	2
		19	17	630	27.5

SEMESTER FOUR

PA 622	Systems Pathology II	4	2	108	5
TE 623	Technique Procedures: Full Spine	2	4	108	4
DI 623	Diagnostic Imaging III: Bone Pathology	2	2	72	3
DX 624	Laboratory Diagnosis	3	0	54	3
MB 621	Microbiology	4	2	108	5
DD 621	Differential Diagnosis I: Eyes, Ears, Nose, Throat	2	0	36	2
DX 625	Diagnostic Skills IV: Orthopedics and Neurology	2	4	108	4
CN 621	Clinical Nutrition I: Pathology and Assessment	2	0	36	2
		21	14	630	28

YEAR THREE

SEMESTER FIVE

TE 714	Technique Procedures: Full Spine	2	4	108	4
DI 714	Diagnostic Imaging IV: Arthritis and Trauma	2	2	72	3
PT 711	Physiologic Therapeutics I	2	2	72	3
DD 712	Differential Diagnosis II: Visceral	4	2	108	5
CN 712	Clinical Nutrition II: Treatment and Management	2	0	36	2
PH 713	Toxicology/Pharmacology	3	0	54	3
PS 711	Clinical Psychology	2	0	36	2
ER 711	Emergency Procedures	1	2	54	2

PP 715	Principles and Practice VI: Jurisprudence	2	0	36	2
MB 712	Epidemiology/Public Health	3	0	54	3
		23	12	630	29

SEMESTER SIX

DI 725	Diagnostic Imaging V: Chest and Abdomen/Review	1	2	54	2
TE 725	Technique Procedures: Full Spine	2	4	108	4
DI 726	X-Ray Positioning and Physics	3	2	90	4
DX 726	Clinical Diagnosis: Dermatology/ Gynecology/Geriatrics	4	0	72	4
DD 723	Differential Diagnosis III: NMS	4	2	108	5
PT 722	Physiologic Therapeutics II: Rehabilitation	1	2	54	2
DX 727	Maternal and Child Health	3	0	54	3
CS 721	Clinic Services I	1	4	90	3
		19	16	630	27

YEAR FOUR

SEMESTER SEVEN

	Clinical Entrance Examination				
CS 812	Clinical Services II	0	25	450	12.5
BP 811	Hospital Procedures, Insurance and Office Management	2	0	36	2
TE 816	Chiropractic Management: Case Diagnosis/Management/Technique Review/Critical Evaluation	0	6	108	3
RS 812	Thesis I	1	0	18	1
BP 812	Small Business Management	2	0	36	2
		5	31	648	20.5
	Clinical Competency Examination				

SEMESTER EIGHT

CS 823	Clinical Services III	0	25	450	12.5
DI 827	X-Ray Review	0	2	36	1
RS 823	Thesis II	1	0	18	1
		1	27	504	14.5
	Clinical Exit Examination				
CS 824	Clinical Services (6 Weeks)	0	25	150	4
		2	79	1158	33

BASIC SCIENCES ____ **1442**

CLINICAL SCIENCES ____ **2556**

CLINICAL SERVICES ____ **1140**

18 WEEK PROGRAM PER SEMESTER TOTAL HOURS ____ **5118**

BASIC SCIENCES ____ 1422

ANATOMY 594
- Histology 90
- Functional Anatomy I 126
- General Anatomy I 108
- General Anatomy II 108
- Functional Anatomy II 126
- Embryology I 18
- Embryology II 18

PHYSIOLOGY 234
- Physiology I 72
- Physiology II 108
- Toxicology/Pharmacology 54

BIOCHEMISTRY 90

NEUROSCIENCE 180
- Neuroscience I 72
- Neuroscience II 108

PATHOLOGY 162
- Fundamentals of Pathology 54
- Systems Pathology 108

MICROBIOLOGY & PUBLIC HEALTH 162
- Microbiology 108
- Epidemiology & Public Health 54

CLINICAL SCIENCES ____ 2556

PRINCIPLES AND PRACTICE 216
- Chiropractic History 36
- Ethics 36
- Subluxation Complex 36
- Communication Skills. 36
- Jurisprudence 36
- Research 36

RADIOLOGY 432
- Imaging I 54
- Imaging II 54
- Bone Pathology 72
- Arthritis 72
- Chest 54
- Positioning & Physics 90
- Review. 36

RESEARCH 36
- Thesis I & II 36

PHYSIOLOGIC THERAPEUTICS 126
- Physiologic Therapeutics I 72
- Physiologic Therapeutics II 54

DIFFERENTIAL DIAGNOSIS 288
- Differential Diagnosis I 36
- Differential Diagnosis II 108
- Differential Diagnosis III 108
- Psychology 36

CHIROPRACTIC SKILLS &TECHNIQUE. 738
- Exam Skills I 72
- Exam Skills II 90
- Technique Procedures 72
- Technique Procedures 72
- Technique Procedures 108
- Technique Procedures 108
- Technique Procedures 108
- Chiropractic Case Management 108

DIAGNOSIS 522
- History I 54
- Skills II 108
- Skills III 72
- Laboratory Diagnosis 54
- Skills IV 108
- Clinical Diagnosis 72
- Maternal/Child Health 54

NUTRITION 72
- Nutrition I 36
- Nutrition II 36

EMERGENCY PROCEDURES 54

BUSINESS PROCEDURES. 72
- Hospital/Ins./Office Procedures . 36
- Small Business Management 36

CLINICAL SERVICES ____ 1140

- Clinic I 90
- Clinic II ..... .450
- Clinic III ..... .450
- Clinic IV. 150

Course identification for the semester curriculum is as follows:

BASIC SCIENCES

AN Anatomy	BC Biochemistry
MB Microbiology & Public Health	NS Neuroscience
PH Physiology	PA Pathology

CLINICAL SCIENCES

BP Business Procedures	CH Chiropractic Exam Skills
CN Clinical Nutrition	DD Differential Diagnosis
DI Diagnostic Imaging	DX Clinical Diagnosis
RS Emergency Procedures	PP Principles and Practice
PS Clinical Psychology	PT Physiological Therapeutics
RS Research Skills	TE Technique Procedures

CLINICAL SERVICES

CS Clinical Services

The course numbering system is a follow:
500 level - courses offered in year one
600 level - courses offered in year two
700 level - courses offered in year three
800 level - courses offered in year four

The next digit identifies the semester the course is given in that academic year. The third digit indicates the sequence within that discipline.

e.g. AN 511
AN - Anatomy
5- year one
1- semester one
1 - first course in discipline sequence

Grades earned by students are submitted to the Registrar utilizing the following designations. Grades earned are on a four (4) point scale with an "A" or 4 quality points being the highest grade attained. Grades with quality points are:

GRADE QUALITY POINTS

A	4.0	C	2.0
B+	3.5	D	1.0
B	3.0	F	0.0
C+	2.5		

The cumulative quality point ratio (QPR) is determined by dividing the number of semester hours into the number of points earned. Transfer credits are not included in this computation.

In addition to the Academic Grades submitted by faculty, the following Administrative Grades are also utilized.

Administrative Grades

I The grade of Incomplete "I", is used by the faculty to indicate that a student has not completed all course requirements. A student will have one week from the last day of the term to meet with the faculty and complete all course requirements. Upon completion of the course requirements the faculty will submit the earned grade. Failure by the student to meet with the faculty and complete the requirements in one week from the last day of the term will result in the grade of "I" being converted to a grade of "F."

Any student with a grade of "F" or "W" will be required to register and retake that course in it's entirety when the course is regularly scheduled. Any student with a grade of "F" or "W" will not be eligible to register for courses for which that course is a prerequisite.

R Students may repeat a course at any grade level below "A". The first repeat will replace the first-time grade for the computation of the QPR.

TCR This indicates transfer credit granted for equivalent work completed at another accredited institution.

W Withdrawal grades are assigned based on the following policy statements:

1. If the student officially withdraws from a course during the official change-of-registration period, that course does not appear on the student's transcript.
2. If a student officially withdraws from a course after the end of the change-of-registration period, but before the end of the official withdrawal period, a grade of "W" is assigned and that course remains on the student's transcript. Courses with a grade of "W" do not count toward the QPR and do not count toward "hours attempted."
3. The names of students who have officially withdrawn from a course and receive the grade of "W" are so listed on the class roster for the balance of the semester.
4. Any exceptions to the above, including late withdrawals, must be approved by the Dean and the Provost before they become official and are recorded. Poor academic performance does not constitute a valid reason for late withdrawal.

Academic policies used to manage and direct the academic program are:

1. Attendance Requirements
2. Requirements for Graduation
3. Good Academic Standing
4. Academic Warning, Probation and Dismissal
5. Dismissal from the College (Non-Academic)
6. Withdrawal from the Program
7. Readmission to the Program

Attendance Requirements

Each student is expected to attend all lectures and laboratories and other activities associated with the total completion of a given course.

A student who is absent from class in excess of ten percent of the total class hours may have his or her grade reduced for lack of participation as outlined in the course syllabus. A student absent in excess of twenty persent of the total class hours will receive a grade of "F."

Requirements for Graduation

In order to be eligible for graduation from the College, candidates must meet the following criteria:

1. Have successfully completed a minimum of four academic years of resident study in an accredited institution granting a first professional degree. The last 3 semesters must have been in residence at the University of Bridgeport College of Chiropractic.
2. Have successfully completed all requirements of the educational program and have achieved a 2.50 cumulative grade point average.
3. Have successfully passed parts I and II of the National Board of Chiropractic Examiners.
4. Have been recommended for graduation by the College Faculty and Administration.
5. Have satisfactorily met all financial obligations to the College, Office of Financial Aid, publication of the class yearbook and commencement exercises.

Good Academic Standing

Good academic standing is achieved when a student is maintaining good grades, has met all financial responsibilities to the College and is not guilty of any breach of the standards governing ethical and clinical conduct.

ACADEMIC WARNING, PROBATION AND DISMISSAL

Safeguards have been built into the system to protect students who are not performing well academically from suffering academic failure. During the semester, the faculty reports to the Dean on a regular basis, concerning the grades of all students in their courses. If it is noted that particular students are doing poorly, these students will be contacted to set up an interview. The interview will consist of a discussion of the causes for the student's poor performance and ways in which he or she might improve a grade.

ACADEMIC WARNING

Academic warning will result when one or more of the following is taking place:

1. Two or more grades of "D" are earned in a single semester.
2. The most recent semester quality point ratio falls below a 2.00.

ACADEMIC PROBATION

Academic Probation occurs when the student's QPR falls below 2.50 or if a student receives a grade of "F" in one or more courses. A student on academic probation is not eligible to carry a full academic course load.

ACADEMIC REMEDIATION

A student on academic probation will be placed in a program of Academic Remediation. The student is required to meet with the Associate Dean of the College to determine what courses will be retaken to satisfy the requirements of Remediation. In general, academic Remediation requires a student to repeat all grades of "F", carry a reduced academic load and possibly repeat grades of "D".

ACADEMIC DISMISSAL

A student who does not show substantial academic improvement after one semester of Remediation, or who is unable to achieve a QPR of 2.50 after two semester of Remediation will be dismissed from the College of Chiropractic.

Academic dismissal may also occur if a student's QPR falls below a 2.50 on a second occasion.

Any student not achieving a QPR of at least 1.75 upon completion of the first semester of study will be academically dismissed from the College of Chiropractic.

DISMISSAL FROM THE COLLEGE

Academic inadequacies are not the only reasons for dismissal from the College. The following is a list of additional causes for dismissal:

1. Failure to meet the generally accepted standards of ethical conduct and clinical practice. Dismissal of this nature is subject to review by a committee of peers, faculty and administration.
2. Pleading guilty or "nolo contende," or being found guilty of any crime involving moral turpitude or being felonious in nature.
3. Repeated violation of public policy, or the demonstration of behavior that creates safety hazards and/or disrupts the order of the institution. Dismissal of this nature is subject to review by a committee of peers, faculty and administration.
4. Failure to meet financial obligations or commitments to the College.

WITHDRAWAL FROM THE PROGRAM

If a student withdraws from University of Bridgeport College of Chiropractic in good standing he or she is eligible for readmission. A student who withdraws when not in good academic standing or, who leaves without officially withdrawing, seriously jeopardizes his or her chances of future readmission.

If a student withdraws with plans to reenter at a later date, he or she should make this clear at the time of withdrawal.

All requirements for the doctoral degree must be completed within seven years from the first matriculation to graduation. If a student withdraws one or more times from the program, the cumulative absences must not exceed three and one half years.

READMISSION TO THE PROGRAM

To be readmitted to the program after withdrawal, a student must write to the Associate Dean for Academic Affairs requesting readmission and indicate the date of re-entry desired. It is important to do this well in advance of such a date.

Minimum Requirements for Admission

The University of Bridgeport College of Chiropractic does not discriminate on the basis of sex, age, color, creed, ethnic origin or handicap in the administration of its education programs or on admissions.

All candidates for admission must furnish proof of having acquired three years (90 acceptable semester hours or more) of study, creditable towards a baccalaureate degree, taken in accredited, degree-granting institutions. Pre-professional education acquired must have been completed with a minimum cumulative Quality Point Ratio of 2.50 on a 4.00 scale. A baccalaureate degree is recommended.

All candidates must have completed the following specific courses as part of their pre-professional preparation:

Communication/Language Skills
6 Semester Hours

Psychology
3 Semester Hours

Social Science
3 Semester Hours

Humanities
3 Semester Hours

Electives (Social Sciences/Humanities)
9 Semester Hours

General Bio/Zoo/Anat & Phys
(with laboratory)
6 Semester Hours

General Chemistry (with laboratory)
6 Semester Hours

Organic Chemistry (with laboratory)
6 Semester Hours

General Physics (with laboratory)
6 Semester Hours

All bio/zoo/anat & phys, chemistry and physics courses must:

- Be courses suitable for students majoring in sciences.
- Consist of a first semester and second semester course in each subject.
- Be passed with a grade of "C" (2.00 on a 4.00 scale) or better. Cumulative science quality point ratio must be 2.25 or better.
- Have a related laboratory.

Applicants must understand that possession of minimum entrance requirements does not constitute a guarantee of acceptance. Each entering class is selected from a large pool of eligible candidates, a majority of whom have completed four-year degrees. Those students selected for acceptance usually have obtained grades which are substantially higher than the minimum requirement.

Cancellation of Admission or Registration

The college reserves the right to cancel the admission or registration of individuals whose attendance at the college, in the opinion of the appropriate administrative officers and dean, is not mutually beneficial to that person and to the institution.

Individuals who have registered at other educational institutions may not disregard such records and make application on the basis of high school and selected college transcripts.

Applicants who gain admission to the college on the basis of incomplete or fraudulent credentials or misrepresentations in their written application for admission may have their:

- admission and registration canceled without refund of any fees; and
- total credits rescinded that have been earned following such admissions; and
- future registration at the college prohibited.

Pre-Professional Requirements for Licensure

It is most important that all candidates for admission thoroughly investigate the specific requirements of each state in which they plan to practice. In some cases, pre-professional requirements must be completed prior to entrance into a chiropractic program in order to be qualified to apply for a state licensing examination.

Foreign Applicants

Applicants who have done pre-professional study in foreign countries must submit official copies of the records of such study as well as certified translations if the original records are not in English. Usually, these records must be evaluated by an appropriate professional agency. Any fees charged by such an agency are the responsibility of the student. Following submission of these documents to UBCC, the Director of Admissions will make contact with the prospective student.

If the applicant is a native of a foreign country, he or she must submit an official score report for the Test of English as a Foreign Language (TOEFL) showing satisfactory performance on this test. To apply to take the exam contact TOEFL, Box 6151, Princeton, NJ 08541-6151.

Application Procedures

Application for admission must include:

1. A properly completed Application for Admission form.
2. A NON-REFUNDABLE application fee of $75.00.

The applicant must provide the following to the Director of Admissions:

1. Official transcripts of all college records.
2. Three letters of recommendation.

Selection of Candidates

The University of Bridgeport College of Chiropractic is coeducational and does not discriminate against any applicant on the basis of sex, race, creed, color or national origin. (Title VI, Civil Rights Act 1964)

All eligible finalists are invited for a personal interview before any action is taken upon their application.

Among the qualities typical of most successful candidates for admission, the following are especially important:

1. Superior communication skills, both oral and written.
2. Evidence of strong motivation to becoming a helping professional and, more specifically, a chiropractor.
3. Initiative and honesty as evidenced in the candidates' transactions within the application process and in all information submitted in support of the application.
4. Academic achievement which compares favorably with that of successful students at the University of Bridgeport College of Chiropractic.

Application Deadlines

Applications for the Fall term must be received prior to March 1, 1997. Spring term applications must be received by August 1, 1997.

NOTIFICATION OF ACCEPTANCE

Applicants will be notified in writing of the decision of the Admissions Committee as soon as a decision is made.

Transfer Credit and Advanced Standing

TRANSFER CREDIT

The University of Bridgeport College of Chiropractic may grant transfer credit for courses taken in accredited professional and graduate schools. In doing so, the following requirements must be met:

1. The courses taken must have content equivalent to courses given at UBCC. If the UBCC course contains a laboratory, so must the course being considered for transfer.
2. A course being considered for transfer must have credits and hours equivalent to or greater than the same course at UBCC.
3. Any course to be transferred must have been passed with a grade of C or better (2.00 on a 4.00 scale.)

4. A transferred course carries credit equal to the UBCC course for which credit is granted. The original grade earned is not transferred and does not affect the student's QPR at UBCC.
5. In order to obtain transfer credit the student must have been granted an honorable withdrawal from the professional or graduate school attended.

It is important to note that all transfer students must meet the entry level prerequisites for first semester students regardless of having been accepted to the institution from which they are transferring. In many cases, UBCC's requirements are higher than those for other chiropractic and professional schools.

Students wishing to transfer must provide the Admissions Committee with an official transcript and a catalog from the chiropractic, professional or graduate school from which they are transferring, as well as a syllabus from each course for which the student is requesting transfer credit.

ADVANCED STANDING

Students who are accepted as transfer students may receive advanced standing if a substantial number of semester hours have been accepted by UBCC. This would enable the student to complete the D.C. program in less than 8 semesters. Transfer credit may be granted either with or without advanced standing. If advanced standing is granted:

1. A special curriculum schedule will be made up for the student based on semester hours transferred and course availability.
2. Tuition will be calculated based on the number of credits being taken per semester multiplied by the single credit fee at the time of the student's attendance.

If advanced standing is not granted, but some semester hours are transferrable, the student will be admitted to the first semester and will be exempt from courses for which transfer credit was granted.

Nutrition Institute

Director: Blonnie Thompson
The Nutrition Institute
Eleanor Dana Hall, Room 113
203-576-4667

Faculty: Paul, Thompson
Adjunct Faculty: Ali, Bocchino, Carroll, Geier, Glade, Kendler, Lieberman

Degree Program

Human Nutrition (M.S.)

Mission Statement

The goal of the Human Nutrition program is to provide a biochemically and physiologically sound understanding of human nutrition and its role in health and disease. The curriculum, highly relevant to health care, is designed to provide up-to-date, graduate level information. Such information enables students to acquire an understanding of nutritional issues as applied to their areas of specialization.

This program is accessible to students with busy schedules. Classes are held Saturday and Sunday, from 9:00 a.m. to 5:00 p.m., just one weekend each month for 18 months.

Accreditation

The Human Nutrition Program is licensed and accredited by the Connecticut Board of Governors for Higher Education and the Commission on Institutions of Higher Education, New England Association of Schools and Colleges, Inc.

Admission Criteria and Procedures

The applicant for admission to the Nutrition Program should hold a baccalaureate degree from an accredited college or university with an above average academic record, ordinarily a QPR of 3.0 or better. The prerequisite courses, Anatomy and Physiology and Introduction to Biochemistry, are required for admission into the graduate program.

Registration Requirements

Students who do not register with the University Registrar, may mail registration forms directly to the Nutrition Institute or register in person at the Nutrition Institute on or before the first day of class.

Degree Requirements

Degree candidates must complete the courses listed in the 31-semester hour curriculum, including an independent research project, with a minimum QPR of 3.0 (B average).

Pre-Human Nutrition Program

The University offers the prerequisites, Anatomy and Physiology and Introduction to Biochemistry in an accelerated weekend program. The courses are offered annually, in May and September. Students must achieve a minimum grade of B in each prerequisite course in order to enter the Master's degree program.

Basic Nutrition Program

All students enrolled in the Master's program who have not taken a basic nutrition course will be required to take Nutrition Seminar which is offered annually, in January and June, after first semester courses.

Joint Program

D.C./M.S. The College of Chiropractic and the Nutrition Institute provide for students who wish to pursue the M.S. in Human Nutrition while working toward the D.C. degree. Eligible students nearing the completion of their Chiropractic studies will be recommended by the Dean of the College of Chiropractic for entry into the Master's program. Chiropractic students will enter the Master's program at an advanced level. They will complete a total of 17 semester hours of required nutrition courses (560C and 560F-M), and 3 semester hours from an elective.

Pre-Human Nutrition Curriculum

Nutr 121	Anatomy and Physiology I, II	6
Nutr 122	Introduction to Biochemistry	4

Basic Nutrition Curriculum

Nutr 123	Nutrition Seminar	1

Master of Science Curriculum

Nutr 560A	Pathophysiologic Basis of Nutrition	4
Nutr 560B	Biochemistry of Nutrition	4
Nutr 560C	Vitamin and Mineral Metabolism	4
Nutr 560D	Clinical Biochemistry	3
Nutr 560E	Assessment of Nutritional Status	3
Nutr 560F	Nutritional Therapeutics	4
Nutr 560H	Developmental Nutrition	3
Nutr 560J	Research in Nutrition	3
Nutr 560M	Biostatistics	3
		31

Division of Health Technology

Director: Blonnie Thompson
The Nutrition Institute
Eleanor Dana Hall, Room 113
(203) 576-4589

Degree Programs

Medical Technology (B.S.)

Mission Statement

The primary objective of the Medical Technology Program is to prepare students to become successful health care professionals. This goal is accomplished by: (1) providing students with basic scientific knowledge and, (2) providing students with the clinical experience and technical skills necessary to accurately perform laboratory tests and analytical procedures. Clinical laboratory testing and analyses require precision and play a crucial role in the detection, diagnosis, and treatment of infections and disease.

The complexity of tests performed, the level of judgement required, and the amount of responsibility assumed or delegated depend on the amount of education and experience of the medical technologists. Therefore, the medical technology program embraces academic excellence and advancement in the field of medical technology.

Work is available as generalists or in specialty areas such as clinical chemistry, blood banking, microbiology, immunology, or cytotechnology. Because of this diversity of jobs within the medical technology profession, students are encouraged to specialize and seek employment in a variety of settings such as hospitals, physician office laboratories, private clinics, state and federal health facilities, medical research laboratories, or companies that manufacture equipment and supplies for the laboratory.

Accreditation

The Bachelor of Science in Medical Technology is licensed and accredited by the State of Connecticut Department of Higher Education and the New England Association of Schools and Colleges.

Admission Criteria and Procedures

A student is admitted to the Division of Health Technology after an evaluation of the high school transcript, class standing, recommendations, and SAT scores has demonstrated that the student has both the aptitude and the potential to succeed in the Medical Technology program.

For information concerning the admission procedures, please refer to the section on University admissions.

General Criteria for Degrees from the Division of Health Technology

The Bachelor of Science in Medical Technology requires a minimum of 120 semester hours of acceptable academic work. Details may be found under Degree Programs in the catalog.

College of Naturopathic Medicine

Dean: James Sensenig, N.D.

Associate Dean for Academic Affairs: Vacant

Director of Admissions: Miriam Madwed

(203) 576-4109
221 University Avenue

Faculty: Epstein, Galiger, Galton, Khan, O'Connor, Paul, Peano, Perle, Raghuvir, Rho, Ross, Sensenig, Shields

Naturopathic medicine is a distinct system of primary health care — an art, science and practice of preventing, diagnosing and treating conditions of the human mind and body.

Naturopathic physicians work with their patients to prevent and treat acute and chronic illness and disease, restore health and establish optimal fitness by supporting the person's inherent self-healing process, the *vis medicatrix naturae.* This is accomplished through:

- **Prevention**
  Prevention of disease is emphasized through public health measures and hygiene as well as the encouragement and guidance of persons to adopt lifestyles which are conducive to optimal health.
- **Diagnosis**
  Diagnosis and evaluation of the individual's state of health are accomplished by integrated modern and traditional, clinical and laboratory diagnostic methods.
- **Treatment and Care**
  Therapeutic methods and substances are used which work in harmony with the person's inherent self-healing process, the *vis medicatrix naturae,* including: dietetics and nutritional substances, botanical medicine, psychotherapy, naturopathic physical medicine including naturopathic manipulative therapy, minor surgery, naturopathic obstetrics (natural childbirth), homeopathy, and acupuncture.

The University of Bridgeport College of Naturopathic Medicine is a non-profit, co-educational professional institution which grants the Doctor of Naturopathic Medicine (N.D.) degree to graduates who successfully complete four academic years of study including clinical training. The program is offered on a full-time basis with no students admitted to a part-time course of study. There are no correspondence nor distance-learning courses offered.

Degree

Doctor of Naturopathic Medicine (N.D.)

New Program

The Doctor of Naturopathic Medicine (N.D.) degree program at the University of Bridgeport was licensed by the State of Connecticut Department of Higher Education in December 1996. The program will hold itself to the national professional educational standards required by the Council on Naturopathic Medical Education.

Mission Statement

The College of Naturopathic Medicine is an integrated unit of the University of Bridgeport, a private, non-sectarian, comprehensive university. The College's mission is to provide appropriate educational experiences to prepare candidates to become doctors of naturopathic medicine. The College seeks: to teach and search for new knowledge; to educate men and women of personal integrity and social conscience; and to maintain close relationships among faculty, students and community professionals. In keeping with the international focus of the University-wide mission, the College of Naturopathic Medicine emphasizes the importance of understanding the traditional medical systems of the world.

The College has identified the following goals in support of its mission:

1. to provide a comprehensive, full-time education that prepares qualified candidates to become doctors of naturopathic medicine.
2. to produce graduates who will be competent to practice as a portal of entry, primary-care, doctors of naturopathic medicine with the necessary qualities and competencies for the benefit of their patients.
3. to advance naturopathic medicine and its knowledge base through scholarship and research.
4. to maintain exemplary out-patient facilities.
5. to be an educational resource for doctors of naturopathic medicine.
6. to offer educational opportunities for the public and other healthcare providers.

Naturopathic Medicine

The American Association of Naturopathic Physicians has adopted the following official definition of Naturopathic Medicine, its principles and practice:

Naturopathic medicine is a distinct system of primary healthcare — an art, science, philosophy and practice of diagnosis, treatment and prevention of illness. Naturopathic medicine is distinguished by the principles upon which its practice is based. The principles are continually reexamined in the light of scientific advances. The techniques of naturopathic medicine include modern and traditional, scientific and empirical methods. The following principles are the foundation of naturopathic medical practice:

PRINCIPLES

The Healing Power of Nature *(Vis Medicatrix Naturae):* Naturopathic medicine recognizes an inherent self-healing process in the person which is ordered and intelligent. Naturopathic physicians act to identify and remove obstacles to healing and recovery, and to facilitate and augment this inherent self-healing process.

Identify and Treat the Causes *(Tolle Causam):* The naturopathic physician seeks to identify and remove the underlying causes of illness, rather than to merely

eliminate or suppress symptoms.

First Do No Harm *(Primum Non Nocere):* Naturopathic physicians follow three guidelines to avoid harming a patient:

- Utilize methods and medicinal substances which minimize the risk of harmful side effects, using the least force necessary to diagnose and treat;
- Avoid when possible the harmful suppression of symptoms;
- Acknowledge, respect and work with the individual's self-healing process.

Doctor As Teacher *(Docere):* Naturopathic physicians educate their patients and encourage self-responsibility for health. They also recognize and employ the therapeutic potential of the doctor-patient relationship.

Treat the Whole Person: Naturopathic physicians treat each patient by taking into account individual physical, mental, emotional, genetic, environmental, social and other factors. Since total health also includes spiritual health, naturopathic physicians encourage individuals to pursue their personal spiritual development.

Prevention: Naturopathic physicians emphasize the prevention of disease — assessing risk factors, heredity and susceptibility to disease and making appropriate interventions in partnership with their patients to prevent illness. Naturopathic medicine is committed to the creation of a healthy world in which humanity may thrive.

PRACTICE

Naturopathic Methods: Naturopathic medicine is defined by its principles. Methods and modalities are selected and applied based upon these principles in relationship to the individual needs of each patient. Diagnostic and therapeutic methods are selected from various sources and systems, and will continue to evolve with the progress of knowledge.

Naturopathic Practice: Naturopathic practice includes the following diagnostic and therapeutic modalities: nutritional medicine; botanical medicine; naturopathic physical medicine including naturopathic manipulative therapy; public health measures and hygiene; counseling; minor surgery; homeopathy; acupuncture; naturopathic obstetrics (natural childbirth); and appropriate methods of laboratory and clinical diagnosis.

Curriculum

The curriculum is designed to prepare graduates of the program to be competent, caring, well-trained physicians offering comprehensive care using the traditional methods and modalities of Naturopathic Medicine.

There are essentially three broad areas of professional education. These are the basic sciences, clinical science, and clinical education or services.

Much of the first two (academic) years of training is devoted to the basic sciences such as anatomy, physiology, pathology and clinical and physical diagnosis.

The philosophy, history, and principles of Naturopathic Medicine are also introduced during these years. One course each semester serves as a focal point in the curriculum to bring practical application and clinical relevance to the subject matter being covered in other courses.

The second two (academic) years consist largely of the clinical sciences. This includes instruction on the modalities of Naturopathic Medicine such as nutrition, botanical medicine, physical medicine, homeopathy, and Oriental medicine, and the application of these therapies to pediatrics, gastroenterology, urology, gynecology, orthopedics, neurology, otolaryngology, cardiology, and other bodily systems.

The third area of emphasis is clinical education which provides the practical hands-on integration of didactic learning with patient treatment. Students will care for patients under the supervision and direction of Naturopathic Physicians as well as medical, osteopathic and chiropractic physicians as appropriate. Clinical training will begin in Semester V and continue through Semester VIII, and includes required time in Summer recess clinical programs before or during the fourth academic year. To be eligible for clinical education training and credit, students must be in good academic standing, successfully complete all courses in Semesters I through VI, and successfully complete the clinic entrance exam.

The course of study consists of four academic years and the required summer recess clinical program. There are two 18 week semesters per academic year.

Semester Based Curriculum

YEAR 1

SEMESTER I

	COURSE	LECT.	LAB	HRS.	SEM. CR.
BS511	Anatomy I	3	3	108	4.5
BS513	Embryology I	1	0	18	1
BS512	Histology	3	2	90	4
BS514	Biochemistry	3	2	90	4
BS515	Physiology I	2	2	72	3
PM511	Liv. Anatomy I: Palpation	1	2	54	2
RS511	Research Meth./Stat.	2	0	36	2
PP511	Naturopathic Hist. & Phil.	2	0	36	2
PS511	Physician Heal Thyself	1	0	18	1
		18	11	522	23.5

SEMESTER II

	COURSE	LECT.	LAB	HRS.	SEM. CR.
BS521	Anatomy II	3	3	108	4.5
BS523	Embryology II	1	0	18	1
BS525	Physiology II	4	2	108	5
BS522	Microbiology	4	2	108	5
CS521	Pathology I	2	2	72	3
PS521	Communication Skills	2	0	36	2
PP521	Naturo. Phil. & Therap.	2	0	36	2
PM521	Living Anatomy/Massage	1	1	36	1.5
		19	10	522	24.0

YEAR 2

SEMESTER III

	COURSE	LECT.	LAB	HRS.	SEM. CR.
CS612	Clinical/Physical Diag. I	5	2	126	6
CS613	Laboratory Diagnosis I	3	0	54	3
CS614	Pub. Health/Epidemiology	3	0	54	3
CS615	Clinical Forum I	0	2	36	1
CS611	Pathology II	4	2	108	5
BM611	Botanical Medicine I	3	0	54	3
PM611	Hydrotherapy	1	2	54	2
OM611	Chinese Medicine I	4	0	72	4
		23	8	588	27.0

SEMESTER IV

	COURSE	LECT		LAB	HRS. SEM. CR.
CS622	Clinical/Physical Diag. II	5	2	126	6
CS623	Laboratory Diagnosis II	2	2	72	3
CS621	Diagnostic Imaging I	2	0	36	2
HM621	Homeopathy I	2	0	36	2
NT621	Nutrition I	4	0	72	4
CS624	Immunology	2	0	36	2
PM621	Physiological Therapeutics	2	2	72	3
BM621	Botanical Medicine II	3	0	54	3
CS626	Emergency Procedures	2	0	36	2
CS625	Clinical Forum II	0	2	36	1
		24	8	576	28.0

YEAR 3

SEMESTER V

	COURSE	LECT	LAB	HRS	SEM. CR.
PM711	Naturo. Manip.Ther. I	2	4	108	4
CS711	Diagnostic Imaging II	2	0	36	2
HM711	Homeopathy II	3	0	54	3
NT711	Nutrition II	4	0	72	4
CS712	Medical Genetics	1	0	18	1
NP711	Gynecology	3	0	54	3
PS711	Counseling Skills & Tech.	1	1	36	1.5
OB711	Obstetrics I	2	0	36	2
PS712	Doctor/Patient Relationship	0.	5	1	27
CE711	Clinical Education I	0	8	144	4
		18.5	14	585	25.5

SEMESTER VI

	COURSE	LECT	LAB	HRS.	SEM. CR.
NP723	Gastroenterology	2	0	36	2
PM721	Naturo. Manip. Ther. II	2	4	108	4
NP724	Minor Surgery	1	1	36	1.5
HM721	Homeopathy III	3	0	54	3
NP722	Cardiology	2	0	36	2
NP721	Pediatrics	2	0	36	2
CS721	Pharmacology I	3	0	54	3
PP721	Practice Management I	2	0	36	2
PS721	Psychological Assessment	1.5	0	27	1.5
CE721	Clinical Education II	0	8	144	4
		18.5	13	567	25.0

SUMMER RECESS

CE731	Clinical Education III	0	8	144	4

YEAR 4

SEMESTER VII

	COURSE	LECT.	LAB	HRS.	SEM. CR.
PS811	Addictions and Disorders	1	0	18	1
CS811	Pharmacology II	1	0	18	1
NP811	EENT	1.5	0	27	1.5
NP812	Endocrinology	1.5	0	27	1.5
NP813	Neurology	1.5	0	27	1.5
CS812	Environmental Medicine	1.5	0	27	1.5
PP811	Practice Management II	1.5	0	27	1.5
RS811	Thesis I	1	0	18	1
CE811	Clinical Education IV	0	24	432	12
		10.5	24	621	22.5

SEMESTER VIII

	COURSE	LECT.	LAB	HRS	SEM. CR.
PM821	Prev./Ther. Exercise	1	0	18	1
NP821	Geriatrics	1	0	18	1
NP822	Urology/Proctology	1.5	0	27	1.5
NP823	Oncology	1.5	0	27	1.5
NP824	Dermatology	1.5	0	27	1.5
PM822	Orthopedics/Sports Med.	1.5	0	27	1.5
PP821	Med. Jurisprudence/Ethics	1.5	0	27	1.5
RS821	Thesis II	1	0	18	1
CE821	Clinical Education V	0	24	432	12
		10.5	24	621	22.5

TOTALS	LECT.	LAB	HRS.	SEM. CR.
Academic (Basic & Clinical)	142	48	3420	166.0
Clinical Service	0	72	1296	36.0
	142	120	4716	202.0

Elective Courses

To address the scope of the clinical skills required of a naturopathic physician, the desire of many students to pursue areas of special clinical interest, and the academic requirements for specialty practice in many states, electives will be offered during a summer intensive program. Students will be eligible to take advanced elective courses in Chinese medicine, botanical medicine, naturopathic obstetrics, homeopathic medicine and minor surgery after completing the prerequisite courses for these electives in the professional curriculum.

Students will be eligible for elective courses in Chinese medicine after semester III, botanical medicine after semester IV, naturopathic obstetrics after semester V, and homeopathic medicine and minor surgery after semester VI.

These electives will prepare the student for area specialization to practice in states which require these additional hours of education. The following number of hours of instruction will be offered in each area:

Chinese Medicine	144 hours
Botanical Medicine	108 hours
Naturopathic Obstetrics	144 hours
Homeopathic Medicine	144 hours
Minor Surgery	18 hours

Elective courses are offered to allow specialization and/or certification in various areas of naturopathic practice. Some, but not all, licensing jurisdictions require a specific minimum number of didactic hours for the practice of these specialties. Elective courses will be developed and added as necessary to meet these legal requirements.

Contact Hours By Area

BASIC SCIENCES — 720

- Anatomy I 108
- Anatomy II 108
- Histology 90
- Embryology I 18
- Embryology II 18
- Biochemistry 90
- Physiology I 72
- Physiology II 108
- Microbiology 108

BOTANICAL MEDICINE — 108

- Botanical Medicine I 54
- Botanical Medicine II 54

CLINICAL NUTRITION — 144

- Nutrition I 72
- Nutrition II 72

CLINICAL SCIENCES — 945

- Pathology I 72
- Pathology II 108
- Clinical/Physical Diagnosis I 126
- Clinical/Physical Diagnosis II 126
- Laboratory Diagnosis I 54
- Laboratory Diagnosis II 72
- Public Health/Epidemiology 54
- Clinical Forum I 36
- Clinical Forum II 36
- Diagnostic Imaging I 36
- Diagnostic Imaging II 36
- Immunology 36
- Emergency Procedure 36
- Medical Genetics 18
- Pharmacology 54
- Pharmacology II 18
- Environmental Medicine 27

HOMEOPATHIC MEDICINE — 144

- Homeopathy I 36
- Homeopathy II 54
- Homeopathy III 54

College of Naturopathic Medicine

NATUROPATHIC OBSTETRICS ____ 36

Obstetrics I 36

NATUROPATHIC PRACTICE/ORGAN SYSTEMS ____ 378

Gynecology 54
Pediatrics 36
Cardiology 36
Gastroenterology 36
Minor Surgery 36
Eye, Ear, Nose and Throat 27
Endocrinology 27
Neurology 27
Geriatrics 18
Urology/Proctology 27
Oncology 27
Dermatology 27

NATUROPATHIC PRINCIPLES AND PRACTICE ____ 162

Naturopathic History & Philosophy 36
Naturopathic Philosophy & Therapeutics 36
Practice Management I 36
Practice Management II 27
Medical Jurisprudence and Ethics 27

ORIENTAL MEDICINE ____ 72

Chinese Medicine; Fundamentals 72

PHYSICAL MEDICINE ____ 477

Living Anatomy I 54
Living Anatomy II 36
Hydrotherapy 54
Physiological Therapeutics 72
Naturopathic Manipulative Therapeutics I 108
Naturopathic Manipulative Therapeutics II 108
Preventive/Therapeutic Exercise 18
Orthopedics/Sports Medicine 27

PSYCHOLOGY ____ 162

Physician Heal Thyself 18
Communication Skills 36
Counseling Skills and Technique 36
The Doctor/Patient Relationship 27
Psychological Assessment 27
Addictions and Disorders 18

RESEARCH ____ 72

Research Methodology/Statistics 36
Thesis I 18
Thesis II 18

CLINICAL EDUCATION ____ 1,296

Clinical Education I 144
Clinical Education II 144
Clinical Education III 144
Clinical Education IV 432
Clinical Education V 432

COURSE IDENTIFICATION

Course identification is as follows:

BS Basic Sciences
BM Botanical Medicine
NT Clinical Nutrition
CS Clinical Services
HM Homeopathic Medicine
OB Naturopathic Obstetrics
NP Naturopathic Practice/Organ System
PP Naturopathic Principles and Practice
OM Oriental Medicine
PM Physical Medicine
PS Psychology
RS Research
CE Clinical Education

The course numbering system is as follows:

500 level - courses offered in year one
600 level - courses offered in year two
700 level - courses offered in year three
800 level - courses offered in year four

The second digit identifies the semester the course is given in that academic year. The third digit indicates the area.

e.g. BS 525
BS - Basic Science
5 - year one
2 - semester two
5 - fifth course in area sequence

Beginning August 1, 1997 all courses in the College of Naturopathic Medicine will be identified with the letter "N" as the first letter in the course description i.e., NBS511 Anatomy I.

GRADES

Grades earned by students are submitted to the Registrar utilizing the following designations. Grades earned are on a four (4) point scale with an "A" or 4 quality points being the highest grade attained. Grades with quality points are:

GRADE QUALITY POINTS

A 4.0
B+ 3.5
B 3.0
C+ 2.5
C 2.0
D 1.0
F 0.0

The cumulative quality point ratio (QPR) is determined by dividing the number of semester hours into the number of points earned. Transfer credits are not included in this computation.

Administrative Grades

In addition to the Academic Grades submitted by faculty, the following Administrative Grades are also utilized.

I The grade of Incomplete "I", is used by the faculty to indicate that a student has not completed all course requirements. A student will have one week from the last day of the term to meet with the faculty and complete all course requirements. Upon completion of the course requirements the faculty will submit the earned grade. Failure by the student to meet with the faculty and complete the requirements in one week from the last day of the term will result in the grade of "I" being converted to a grade of "F".

Any student with a grade of "F" or "W" will be required to register for and retake that course in its entirety when the course is regularly scheduled. Any student with a grade of "F" or "W" will not be eligible to register for courses for which that course is a prerequisite.

R Students may repeat a course at any grade level below "A". The first repeat will replace the first-time grade for the computation of the QPR.

TCR This indicates transfer credit granted for equivalent work completed at another accredited institution.

W Withdrawal grades are assigned on the following policy statements:

1. If the student officially withdraws from a course during the official change-of-registration period, that course does not appear on the student's transcript.

2. If a student officially withdraws from a course after the end of the change-of-registration period, but before the end of the official withdrawal period, a grade of "W" is assigned and that course remains on the student's transcript. Courses with a grade of "W" do not count toward the QPR and do not count towards "hours attempted."

3. The names of students who have officially withdrawn from a course and receive the grade of "W" are so listed on the class roster for the balance of the semester.

4. Any exceptions to the above, including late withdrawals, must be approved by the Dean and the Provost before they become official and are recorded. Poor academic performance does not constitute a valid reason for late withdrawal.

Academic Policies

ATTENDANCE REQUIREMENTS

Each student is expected to attend all lectures and laboratories and other activities associated with the total completion of a given course.

A student who is absent from class in excess of ten percent of the total class hours may have his or her grade reduced for lack of participation as outlined in the course syllabus. A student absent in excess of twenty percent of the total class hours will receive a grade of "F".

REQUIREMENTS FOR GRADUATION

In order to be eligible for graduation from the College, candidates must meet the following criteria:

1. Have successfully completed a minimum of four academic years of resident study in an accredited institution granting a first professional degree. The last 3 semesters must have been in residence at the University of Bridgeport, College of Naturopathic Medicine.
2. Have successfully completed all requirements of the educational program and have achieved a 2.50 cumulative grade point average.
3. Have been recommended for graduation by the College Faculty and Administration.
4. Have satisfactorily met all financial obligations to the College, Office of Financial Aid, publication of the class yearbook and commencement exercises.

GOOD ACADEMIC STANDING

Good academic standing is achieved when a student is maintaining good grades, has met all financial responsibilities to the College and is not guilty of any breach of the standards governing ethical and clinical conduct.

ACADEMIC WARNING, PROBATION, REMEDIATION AND DISMISSAL

Safeguards have been built into the system to protect students who are not performing well academically from suffering academic failure. During the semester, the faculty reports to the Dean on a regular basis, concerning the grades of all students in their courses. If it is noted that particular students are doing poorly, these students will be contacted to set up an interview. The interview will consist of a discussion of the causes for the student's poor performance and ways in which he or she might improve a grade.

ACADEMIC WARNING

Academic warning will result when one or more of the following is taking place:

1. Two or more grades of "D" are earned in a single semester.
2. The most recent semester quality point ratio falls below a 2.00.

ACADEMIC PROBATION

Academic probation occurs when the student's QPR falls below 2.50 or if a student receives a grade of "F" in one or more courses. A student on academic probation is not eligible to carry a full academic course load.

ACADEMIC REMEDIATION

A student on academic probation will be placed in a program of academic remediation. The student is required to meet with the Associate Dean of the College to determine what courses will be taken to satisfy the requirements of remediation. In general, academic remediation requires a student to repeat all grades of "F", carry a reduced academic load and possibly repeat grades of "D".

ACADEMIC DISMISSAL

A student who does not show substantial academic improvement after one semester of remediation, or who is unable to achieve a QPR of 2.50 after two semesters of remediation will be dismissed from the College of Naturopathic Medicine.

Academic dismissal may also occur if a student's QPR falls below a 2.50 on a second occasion.

Any student not achieving a QPR of at least 1.75 upon completion of the first semester of study will be academically dismissed from the College of Naturopathic Medicine.

DISMISSAL FROM THE COLLEGE

Academic inadequacies are not the only reason for dismissal from the College. The following is a list of additional causes for dismissal:

1. Failure to meet the generally accepted standards of ethical conduct and clinical practice. Dismissal of this nature is subject to review by a committee of peers, faculty and administration.
2. Pleading guilty or "nolo contendere," or being found guilty of any crime involving moral turpitude or being felonious in nature.

3. Repeated violation of public policy, or the demonstration of behavior that created safety hazards and/or disrupts the order of the institution. Dismissal of this nature is subject to review by a committee of peers, faculty and administration.
4. Failure to meet financial obligations or commitments to the College.

WITHDRAWAL FROM THE PROGRAM

If a student withdraws from the University of Bridgeport College of Naturopathic Medicine in good standing he or she is eligible for readmission. A student who withdraws when not in good academic standing or, who leaves without officially withdrawing, seriously jeopardizes his or her chances of future readmission.

If a student withdraws with plans to re-enter at a later date, he or she should make this clear at the time of withdrawal.

All requirements for the doctoral degree must be completed within seven years from the first matriculation to graduation. If a student withdraws one or more times from the program, the cumulative absences must not exceed three and one half-years.

READMISSION TO THE PROGRAM

To be readmitted to the program after withdrawal, a student must write to the Associate Dean for Academic Affairs requesting readmission and indicate the date of re-entry desired. It is important to do this well in advance of such a date.

Minimum Requirements for Admission

The admission requirements for the Doctor of Naturopathic Medicine degree program at the University of Bridgeport are:

All candidates for admission to the naturopathic medical degree program must furnish proof of having acquired a baccalaureate degree, taken in an accredited, degree-granting institution.Pre-professional education acquired must have been completed with a minimum cumulative Quality Point Ratio of 2.50 on a 4.00 scale.

All candidates must have completed the following specific courses as part of their professional preparation:

Communication/Language Skills
6 semester hours

Psychology
3 semester hours

Social Science
3 semester hours

Humanities
3 semester hours

Electives (Social Science/Humanities)
9 semester hours

General Biology/Zoology/Anatomy and Physiology (with lab)
6 semester hours

General Chemistry (with lab)
6 semester hours

Organic Chemistry (with lab)
6 semester hours

General Physics (with lab)
6 semester hours

All biology/zoology/anatomy and physiology, chemistry and physics courses must:

- Be course suitable for students majoring in sciences
- Consist of a first semester and second semester course in each subject.
- Be passed with a grade of "C" (2.00 on 4.00 scale) or better. Cumulative science quality point ratio must be 2.5 or better.
- Have a related laboratory.
- Must have been taken within the past seven years.

Applicants must understand that possession of minimum entrance requirements does not constitute a guarantee of acceptance.

Application Procedures

Application for admission must include:

1. A properly completed Application for Admission form.
2. A NON-REFUNDABLE application fee of $75.00.

The applicant must provide the following to the Director of Admissions:

1. Official transcripts of all college records.
2. Three letters of recommendation.

International Applicants

International applicants must complete an Application for International Students as well as an Application to the College of Naturopathic Medicine. Applicants who have done pre-professional study in foreign countries must submit official copies of the records of such study as well as certified translations if the original records are not in English. Usually, these records must be evaluated by an appropriate professional agency. Any fees charged by such an agency are the responsibility of the student. Following submission of these documents to UBCNM, the Director of Admissions will make contact with the prospective student.

All applicants whose native language is not English (including U.S. citizens) must demonstrate proficiency in English at a level appropriate for advanced scientific study. At a minimum, proficiency can be demonstrated in one of the ways listed below:

1. A score of 550 or better on the Test of English as a Foreign Language (TOEFL). Information on the TOEFL can be obtained from TOEFL, P.O. Box 6151, Princeton, NJ 08541-6151, U.S.A., ***OR;***
2. Receipt of a grade of "C" or better in one semester of English at an accredited U.S. college or university.

Application Deadlines

Applications for the Fall term must be received prior to the preceding March 1. Spring term applications must be received by the preceding August 1.

NOTIFICATION OF ACCEPTANCE

Applicants will be notified in writing of the decision of the Admissions Committee as soon as a decision is made.

Transfer Credit

The University of Bridgeport College of Naturopathic Medicine may grant transfer credit for courses taken in accredited professional and graduate schools. In doing so, the following requirements must be met:

1. Courses taken must have content equivalent to courses given at UBCNM. If the UBCNM course contains a laboratory, so must the course being considered for transfer.
2. A course being considered for transfer must have credits and hours equivalent to or greater than the same course at UBCNM.
3. Any course to be transferred must have been passed with a grade of "C" or better (2.00 on a 4.00 scale.)
4. A transfer course must carry credit equal to the UBCNM course for which credit is granted. The original grade earned is not transferred and does not affect the student's QPR at UBCNM.
5. In order to obtain transfer credit the student must have been granted an honorable withdrawal from the professional or graduate school attended.

It is important to note that all transfer students must meet the entry level prerequisites for first semester students regardless of having been accepted to the institution from which they are transferring.

Students wishing to transfer must provide the Admissions Committee with an official transcript and a catalog from the naturopathic, professional or graduate school from which they are transferring, as well as a syllabus from each course for which the student is requesting transfer credits.

Advanced Standing

Because the Doctor of Naturopathic Medicine (N.D.) degree program is a new program with its first class starting in the Fall of 1997, very few of the offerings required for advanced standing students are in place. Advanced standing is therefore not an available option during the 1997-98 academic year, and will be extremely limited during the 1998-99 academic year.

Selection of Candidates

The University of Bridgeport College of Naturopathic Medicine is coeducational and does not discriminate against any applicant on the basis of sex, race, creed, color or national origin. (Title VI, Civil Rights Act 1964).

All eligible finalists are invited for a personal interview before any action is taken upon their application.

Among the qualities typical of most successful candidates for admission, the following are especially important:

1. Superior communication skills, both oral and written.
2. Evidence of strong motivation to become a helping professional and, more specifically, a physician.
3. Initiative and honesty as evidenced in the candidate's transactions within the application process and in all information submitted in support of the application.
4. Academic achievement which compares favorably with that of successful students at the University of Bridgeport College of Naturopathic Medicine.

Cancellation of Admission or Registration

The College reserves the right to cancel the admission or registration of individuals whose attendance at the College, in the opinion of the appropriate administrative officers and Dean, is not mutually beneficial to that person and to the institution.

Individuals who have registered at other educational institutions may not disregard such records and make application on the basis of high school and selected college transcripts.

Applicants who gain admission to the College on the basis of incomplete or fraudulent credentials or misrepresentations in their written application for admission may have their:

- admission and registration cancelled without refund of any fees; and
- total credits rescinded that have been earned following such admissions; and
- future registration at the College prohibited.

Pre-Professional Requirements for Licensure

It is most important that all candidates for admission thoroughly investigate the specific requirements of each state in which they plan to practice. In some cases, pre-professional requirements must be completed prior to entrance into a naturopathic program in order to be qualified to apply for a state licensing examination.

Licensing and Professional Societies

Currently, Doctors of Naturopathic Medicine are licensed in 11 states: Alaska, Arizona, Connecticut, Hawaii, Maine, Montana, New Hampshire, Oregon, Utah, Vermont and Washington. Graduates of

approved naturopathic colleges take a national standardized examination called the Naturopathic Physicians Licensing Examination to be eligible for licensing in most states.

For specific professional requirements for licensing, candidates should contact the appropriate State Board of Naturopathic Examiners or the designated State licensing agency.

Most states have a professional naturopathic association, and the American Association of Naturopathic Physicians (AANP) is the national professional association for naturopathic medicine.

Information Subject to Change

The College of Naturopathic Medicine provides the foregoing information for the purpose of providing students, applicants, and the public with information about the educational programs and policies of the College. This information does not constitute a contract. The College reserves the right to make changes in the program, policies, tuition, fees, schedules, and any other content at any time without prior notice.

Fones School of Dental Hygiene

Director: Jocelyn Poisson
Eleanor Naylor Dana Building
(203) 576-4138

Faculty: Earley, Howard, Poisson, Zayan

Degree Programs

Dental Hygiene, (A.S., B.S.)

Description

The Fones School of Dental Hygiene, established in 1949, was named for Dr. Alfred Civilion Fones, the dentist who was instrumental not only in the University of Bridgeport, but also the world dental hygiene movement. Accredited since the American Dental Association publication of September, 1953, the Fones program is in full accord with the principles established by the Commission on Dental Accreditation, a specialized accrediting body recognized by the Council on Post-Secondary Accreditation and the United States Department of Education. The graduate is eligible for National, Regional, and State examinations in each of the fifty United States, and students earning the Associate's degree may apply their credits towards a Bachelor's degree.

Accreditation

The A.S. and B.S. degree programs in Dental Hygiene are both licensed and accredited by the State of Connecticut Department of Higher Education and the New England Association of Schools and Colleges.

Admission Criteria and Procedures

Qualifications and procedures required of applicants to the Fones School are the same as those described in the chapter on Admissions. Dental Hygiene courses begin in the fall term and the Associate's degree curriculum is open only to full-time Dental Hygiene students. Clinical students are required to submit a physical, dental and visual acuity report on an annual basis.

General Criteria for the A.S. and the B.S. Degree in Dental Hygiene

The two year basic core curriculum of the Fones School combines courses from the College of Graduate and Undergraduate Studies and the Fones School of Dental Hygiene to provide a broad educational preparation. In addition to basic and dental science theory, the program provides education in preventive service and dental health education.

During the second year, the students receive clinical education at the Fones Dental Health Center on campus, and through assignments to the clinical and educational facilities of school dental health programs, hospitals and community agencies. These assignments are directly supervised by Fones faculty. Students are responsible for providing their own transportation to community agencies.

A student who earns a grade of C- or below in a course in the major field, must obtain a written statement from the School Director specifying the procedure necessary to remedy the deficiency and remain in the major.

Enrollment in the second year is contingent on completing all first year requirements and achieving a QPR of 2.0.

Education at the baccalaureate level enhances the dental hygienists' opportunities, abilities, background and values. The professional dental hygiene curriculum is combined with a liberal arts education. Upon satisfactory completion of 120-125 credits in the areas of study specified, the student will be recommended for the degree of Bachelor of Science in Dental Hygiene.

Students in the Bachelor of Science degree (B.S.) may integrate the Bachelor's courses with the clinical aspect of the Dental Hygiene curriculum or pursue a Baccalaureate degree (B.S.) after completing clinical preparation at the Associate in Science Certificate Level. This Baccalaureate degree completion approach is available to Fones' students and graduates of a Dental Hygiene program that is accredited by a specialized accrediting agency recognized by the Council on Post Secondary Accreditation and the United States Department of Education.

Students wishing to earn a Bachelor of Science degree may select curriculum from three Baccalaureate tracks: General Education, Dental Hygiene Education and Dental Hygiene Practitioner.

All courses listed in the major program section of the catalog for the Associate in Science and/or Bachelor of Science degree are required for graduation. The majority of Dental Hygiene courses may be taken during the regular academic year.

English Language Institute (ELI)

Director: James L. King
21 Mandeville Hall, Bridgeport, CT 06601
Tel: (203) 576-4860
Fax: (203) 576-4861
E-mail: esl@cse.bridgeport.edu

General Information

The English Language Institute of the University of Bridgeport offers an intensive program of English as a Second Language. ELI also organizes weekend trips to places such as New York, Boston and Washington, D.C., as well as activities on campus designed to introduce international students to the U.S., its language and its people.

ELI classes are held 5 days a week, Monday through Friday. A typical class day consists of 5 hours of instruction in the classroom and language laboratory and may also include testing, evaluation, and cultural activities.

ELI students receive a University of Bridgeport student I.D. card and are entitled to use facilities on the campus of the University of Bridgeport, such as the Wahlstrom Library, the Center for Academic Computing, Email/Internet access and the Wheeler Recreation Center, to name but a few.

Admission

Although there are no academic requirements for admission to the English Language Institute, ELI students must have a strong personal commitment to learning the English language. Courses in English as a Second Language are offered year-round at all levels from beginner through advanced. ELI application forms and additional program information may be obtained at the above address.

Applicants must be at least 17 years old. Applications are accepted at any time of the the year, and new students may commence courses on any of thirteen starting dates throughout the year. ELI issues an official letter of admission to the program and an I-20 form promptly upon receiving a properly completed ELI application. After receiving the I-20 issued by ELI, the prospective student may apply for an F-1 student visa at an American embassy or consulate prior to coming to the United States.

Students enrolled at ELI are in one of the following two categories:

1. Those who do not intend to undertake degree studies at the University of Bridgeport. In general, these students apply to ELI and come to learn English while on leave either from a school or a job in their home country. They remain at ELI until they meet their personal learning goals. Frequently, students in this category decide to apply for admission to a degree program of the University while studying at ELI.
2. Those who intend to undertake degree studies at the University of Bridgeport. These students apply to ELI and to the University of Bridgeport for admission to particular degree programs. They have "conditional acceptance" to the University while studying at ELI and will receive full acceptance when they satisfy the University's "English language requirement." It is important to note that successful completion of the program of the English Language Institute satisfies the "English language requirement" for admission to degree programs of the University of Bridgeport. ELI graduates are not required to take the TOEFL.

The Curriculum

The 12-level curriculum of ELI focuses on improving skills in speaking, listening, writing, and reading the English language. At all levels of the curriculum, ELI instructors seek to help students improve their language skills through active use of the language both in and out of the classroom.

New students complete a placement test upon arrival and are placed in one of the 12 levels of English offered by ELI. An average enrollment of 12 students per class allows ELI instructors to meet the individual needs of students in the classroom and provide high-quality instruction. In addition, the staff of ELI and of the University of Bridgeport are available to help students on an individual basis.

Students who are placed in one of the beginning levels, 1 through 4, concentrate on increasing their fluency in speaking and listening. Basic reading and writing are used to consolidate grammar and communication skills.

As students progress through the intermediate levels, 5 through 8, they continue to improve their speaking and listening skills while taking on more challenging tasks in reading and writing.

In the advanced levels, 9 through 12, students strive to achieve competence in language-dependent tasks similar to those that are required of native speakers of English in both academic and career-related activities. These include reading for content; note-taking from spoken and written materials; speaking skills needed to relate information, to persuade, to negotiate, and to inquire; and skills needed in essay and report writing, as well as in effective correspondence.

Graduates of ELI receive a "Certificate of Completion" which certifies that they have met the English language requirement for admission to the University of Bridgeport. Transcripts of grades are issued upon request.

Schedule of Charges

Prospective students should include $35 with their ELI application. This nonrefundable application fee includes the cost of processing the application and sending the ELI letter of admission and I-20 form via Express Mail to the applicant's address anywhere in the world.

The following charges are shown for one 4-week session at ELI. Students may stay for any number of 4-week sessions they choose. Charges are due and payable in full at the beginning of each 4-week session.

Tuition, textbooks, fees: $1,040
Residence hall charges $395
(double occupancy)
Meals (40) $225

Total for one 4-week session $1,660
(These charges are subject to change without notice.)

In addition, students should plan on spending at least $350 per 4-week session to cover miscellaneous personal expenses such as insurance, recreational travel, local transportation, books, laundry, clothing, additional meals, etc.

University of Bridgeport-Stamford Center

Executive Director: Sharon Klebe
Administrative Coordinator:
Marilyn Gordon

5 Riverbend Drive, P.O. Box 4585
Stamford, Connecticut 06907
Tel: (203) 358-0700
Fax: (203) 967-3735

The University of Bridgeport began offering programs in Stamford in 1973, holding graduate courses in education for teachers. As a result, many of the teachers in the Stamford public schools hold at least one degree from the University of Bridgeport and many hold two.

In 1986, the University moved its Stamford offerings to the Riverbend Business Center, a corporate park with ample parking space centrally located in Stamford near the Springdale Railroad Station and Route 95. The facility in Stamford contains offices, classrooms, a library, a student lounge with food services and a computer laboratory. The bookstore at the Stamford facility provides textbooks to Stamford-based students.

Location in the Riverbend Business Center affords the University the opportunity to conduct conferences within the business park, making use of the extensive conference facilities and food service.

The University offers a comprehensive program in Stamford including graduate programs in Business, Computer Science, Education, Counseling, Human Resource Development and Educational Management and an undergraduate degree program, called IDEAL, for working adults. More than 400 adult students attend classes at the University site in Stamford each semester, many of them in the evenings and on weekends. The mission of the University of Bridgeport-Stamford Center is to serve the educational needs of residents and employees through professional programs designed for job enhancement. Most students are employed full-time for Southern Connecticut, New York or New Jersey companies or organizations and attend classes part-time.

Degree programs offered at the University of Bridgeport-Stamford Center are offered in flexible formats and at times which suit the needs of working adults. Many classes are conducted in the evening or on weekends. Two graduate degree programs meet on weekends and offer adult students an opportunity to complete a degree in a relative short period by coming to college one or two weekends a month. IDEAL provides five, eight and ten week course schedules facilitated by combining intensive pre-class reading with post-class papers. This format enables adult students to obtain three undergraduate credits in a streamlined way.

The University of Bridgeport-Stamford Center office is open weekdays from 9:30 a.m. to 8:00 p.m. and on weekends from 8:00 a.m. to 3:00 p.m. Classes are conducted at the site until 10:00 p.m. four nights a week and all day on most Saturdays and Sundays.

Ernest C. Trefz Center for Venture Management and Entrepreneurial Studies

The Ernest C. Trefz Center for Venture Management and Entrepreneurial Studies (CVM) builds upon the entrepreneurial spirit of its principle supporter to encourage the development and retention of small businesses in the region. The Center provides opportunities for potential entrepreneurs and small business persons to get expert help with their ventures and for faculty and students to participate in entrepreneurial experiences.

COMPONENTS OF THE CENTER FOR VENTURE MANAGEMENT INCLUDE:

- *The Business Development Institute* helps potential entrepreneurs and small business persons get help in start-up, business organization, finance, marketing, staffing and management; and assists in evaluating technology and development planning.
- *The Bridgeport Foreign Trade Institute* sponsors monthly international business seminars and conferences; develops networks of international business firms; provides consultation services to those individuals and organizations who attempt to enter international business; and assists local governments in promoting local businesses and products made in the State of Connecticut to foreign markets and investors.
- *The Urban Management Institute* studies socio-economic issues in the region and recommends appropriate policy initiatives.
- *The Special Projects Unit* promotes activities especially targeted for small business people in the region through conferences, seminars and special events. Typical events include: *"The Entrepreneurship Conference," "The National Innovation Workshop," "Technology Transfer and Licensing," "The Banking Forum,"* and Minority Workshops on *"How To Succeed In Small Business."*

New England Center for International and Regional Studies

Director: Dr. Stoyan Ganev
Waldemere Hall
(203) 576-4966 Fax: 203-576-4967
E-Mail: Nec@cse.bridgeport.edu

Associate Director
Dr. Hans van der Giessen
Stratford Hall
(203) 576-4398

Executive Advisor: Dr. Vladimir Kvint

Chair of International Business/Emerging Market Studies: Dr. Vladimir Kvint

Chair of International Studies:
Dr. Hans van der Giessen

NEC Honorary Fellows:

H.E. Oleg Davydov
Vice Premier of the Russian Federation

H.E. Hennadi Udovenko Foreign
Minister of Ukraine

Dr. Vladimir Kvint
Managing Director Arthur Andersen

Mission Statement

The New England Center for International and Regional Studies, established in August, 1996, under the auspices of the College of Graduate and Undergraduate Studies of the University of Bridgeport, is inspired by a belief in a better future for its students through the internationalization of business and social science curricula. Its activities focus upon three specific areas:

1. As a leadership forum to address critical issues of world affairs, the United Nations and emerging markets.
2. As a research institute concentrating on the United Nations and Emerging Markets.
3. As an academic institution committed to enriching and strengthening existing academic programs as well as developing new academic programs in the fields of:
   a. International Political Economy and Diplomacy,
   b. International Management and Emerging Markets, and
   c. Forestry and Sustainable Development.

Highlights of NEC Activities in Academic Year 1996-97

1. Inaugural Symposium:New England and Emerging Markets; With the participation of decision-makers and experts from leading international and U.S. firms such as Arthur Andersen, Baker & McKenzie, RZB as well as diplomats and business leaders from emerging markets countries including Russia, Bulgaria, and Ukraine. (September 29, 1997).
2. Visit to NEC by Urkrainian Minister of Foreign Affairs H.E. Hennadi Udovenko (Also nominee for President of the 52nd United Nations General Assembly). (September 30, 1996).
3. Hosted Visit of Oleg Nekrassov, Member of the Russian Duma and Member of President Yeltsin's Foreign Relations Council and a Delegation from Ural State University, Alma Mater of President and Mrs. Yeltsin (October 4, 1997).
4. Co-Organized the First International Banking Congress on U.S.–C.I.S.–Baltic State Financial Relations.

   Attended by Ministers of Finance, Central Bank Chairmen, and Executives of major American and Eastern European Private Banks. Conference Luncheon Keynote Speakers were University of Bridgeport President Richard L. Rubenstein and NEC Director Stoyan Ganev. (January 28, 1997).
5. Conferred the Title of Honorary Fellow of NEC upon Russian Vice Premier and Minister of Foreign Economic Relations H.E. Oleg Davydov. (January 29, 1997)
6. Conferred the Title of Honorary Fellow of NEC to H.E. Hennady Udovenko and Dr.Vladimir Kvint, Arthur Andersen Managing Director of Emerging Markets at Ukraine's Permanent Mission to the United Nations with the participation of the U.N. Assistant Secretary General, U.N. Director of General Assembly Affairs, and more than twenty-one Ambassadors to the United Nations. (March, 1997)
7. Hosted Visit of Professor Sergei I. Dolgov, Rector of the All-Russian Foreign Trade Academy (responsible for postgraduate training of Russian commercial attache and international trade representatives). Signed a protocol agreement for inter-institutional cooperation and the creation of joint certificate program in International Business/Emerging Market Studies (April, 1997).
8. The NEC Director was invited to visit the Russian Federation's Autonomous Region of Bazhorkhistan by the President of Bazhorkistan to explore means of cooperation (April, 1997) .

Academy of International Studies

Founded in May, 1997, the Academy of International Studies is designed to prepare students to pursue independent research and study in the fields of International Studies and International Business. To receive a Diploma of Recognition from the Academy, students must have a strong academic record, agree to following certain NEC-related courses (a minimum of two courses per academic year), participate in special advanced lectures (available only to those associated with the Academy), and submit a paper which passes a critical review by the members of the NEC Academy of International Studies.

Office of Distance Learning

Director: Michael Giampaoli
Wahlstrom Library, 5th floor
(203) 576-4851

Initiated in 1996 under the auspices of the Provost, the Office of Distance Learning is currently developing graduate and undergraduate degree and certificate programs as well as continuing education programs in a variety of academic fields including nutrition, computer science, and business. Programs developed by this Office in conjunction with the College of Graduate and Undergraduate Studies will make it possible for students to earn academic credit from UB in the convenience of their home or places of employment. Further information on degree and certificate programs is available through contacting the Program Director at (203) 576-4851.

Pre-Professional Programs

The University of Bridgeport is committed to providing the appropriate education and guidance to those students for whom the baccalaureate degree is but a steppingstone to the completion of a professional degree in the health sciences or law. To this end the University has established a Pre-Law and a Pre-Health advisory program.

Pre-Law Studies

Advisor: Hans van der Giessen
Stratford Hall
(203) 576-4398

Admission to law school is not accomplished by meeting a pre-determined set of requirements, other than a baccalaureate degree from an accredited institution. No particular major is favored or recommended, but the most commonly pursued undergraduate disciplines are in the liberal arts.The University of Bridgeport's Bachelor of Elective Studies degree provides students with the opportunity to create a program, in consultation with their advisor, that may more precisely fit the needs of the pre-law student. Accredited schools of law do require, however, that applicants take the Law School Admission Test (LSAT) and virtually all require a personal essay. The percentile score achieved on the LSAT, the cumulative grade point average earned as an undergraduate, and the personal essay form the foundation of the admission decision process.

The College of Graduate and Undergraduate Studies has constituted a Pre-Law Faculty Advisory Council consisting of individuals with significant experience in the law or pre-law studies. Pre-Law students will be referred to an appropriate advisor who will counsel students in the area of course selection, LSAT preparation, law school selection, and the preparation of the law school application.

Pre-Health Professional Studies

Advisor to Pre-Health: Robert Singletary
Dana Hall, Room 142
(203) 576-4271

Advisor to Pre-Chiropractic:
Laura Hildreth
Chiropractic Building
(203) 576-4352

The major categories for Pre-Health Professional Studies are Pre-Chiropractic, Pre-Naturopathic, Pre-Dental, Pre-Medical, and Pre-Veterinary Studies. Virtually all of the professional schools in these fields have the same minimum requirements, and these normally include 8 hours of laboratory biology, 8 hours of general and 8 hours of organic chemistry, and 8 hours of laboratory physics. Beyond these, requirements may differ slightly depending on the health profession that is being pursued. The largest percentage of students admitted to health professional graduate studies majored in biology, and chemistry is the second most common major, but students majoring in disciplines as diverse as history, music or psychology are also viable candidates provided that they satisfy the pre-requisites of the professional school to which they seek admission. The University of Bridgeport's Bachelor of Elective Studies degree provides students with the opportunity to create a program, in consultation with their advisor, that may more precisely fit the needs of the pre-health professional student. It should be noted that pre-health professional studies in any of the enumerated categories also provides an excellent foundation for other careers in the health sciences, including naturopathy, osteopathy, podiatry, physical therapy, optometry, and pharmacy.

Undergraduate Degree Programs

Accounting *Bachelor of Science Degree*

Advisor: William Greenspan
Mandeville Hall, Room 309
(203) 576-4378

The accounting curriculum provides an opportunity for students with varied interests to obtain a broad-based understanding of the role of accounting in the measurement and communication of financial and economic data. A number of interdisciplinary courses have been designed for those students wishing a maximum overview of multinational issues in accounting and taxation as well as for those students who intend to pursue more advanced studies in accounting. Accounting students who expect to take the Certified Public Accountant professional examinations should select elective courses with the approval of and in consultation with the Chair of the Accounting Department.

The University Core Curriculum requires passing the mathematics competency exam or taking Mathematics 105. This competency is a prerequisite for Management Science 110 and 115. The Business Core requires passing a computer competency exam or taking Management Information Systems 191. Students anticipating graduate study in Business are advised to take calculus (Mathematics 106 or Management Science 140) as a free elective.

Upper Division coursework provides students with a common body of managerial knowledge, multinational business studies, study in a major field, and an internship or business development project. The concentration of professional courses in the last two years builds upon the broad-based analytical tools and liberal arts foundation of the first two years.

A student is admitted to the School of Business, through an evaluation of the high school transcript, class rank, and SAT scores, based on the determination that the student has demonstrated potential in analytical reasoning, comprehension and expression in words and creative power in thinking. Students transferring from undergraduate majors of other colleges should have a minimum quality point ratio of 2.5.

Management 350, Business Policy and Strategy, is the Capstone Course of this degree program. The final examination of this course shall constitute, therefore, an outcome assessment of what the student has learned in the program. This examination, normally an extensive and comprehensive case study, will be graded by several faculty members representing different and relevant disciplines.

Summary of Requirements

PROGRAM REQUIREMENTS

Acct 101	Financial Accounting	3
MS 110	Intro to Management Science	3
MIS 191	Computer Concepts	3
Law 251	Business Law I	3
MS 115	Probability for Business	3
MS 120	Statistical Decision-Making for Business	3
Acct 210	Accounting Systems and Controls	3
Acct 308	Financial Reporting and Analysis	3
Acct 327	Multinational Accounting	3
Acct 329	Tax Law and Accounting	3
Acct 331	Managerial Accounting	3
Fin 309	Managerial Finance	3
Mgmt 301	Operations Management	3
MIS 300	Management Information Systems	3
Mktg 305	Principles of Marketing	3
Econ 375	Multinational Economics	3
Fin 380	Multinational Finance	3
Mgmt 302	Multiculture Management	3
Mktg 342	Multinational Marketing	3
Mgmt 350	Business Policy and Strategy	3
BuAd 382	Senior Project/Internship	3
		63

Plus six semester hours of Accounting electives selected from:

Acct 321	Accounting Standards & Reporting	3
Acct 322	Accounting Practice	3
Acct 332	Tax Law Compliance and Reporting	3
Acct 335	Auditing	3
Acct 399	Independent Study	3
		6

FREE ELECTIVES 9

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition and Rhetoric I	3
IntSt C101	Integrated Studies/ Oral Communication	3
Math C105	Intermediate Algebra	3
Sci C101/C102	Natural Science I & II	6
Hum C201/C202	Humanities I & II	6
Econ 201	Principles of Economics - Macro	3
Econ 202	Principles of Economics - Micro	3
Engl 202	Advanced Composition (for Business)	3
FA C101	Fine Arts	3
Caps C390	Capstone Seminar	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
		42

Total Semester Hours 120

Suggested Program

FIRST SEMESTER

Acct 101	Financial Accounting	3
Engl C101	Composition and Rhetoric I	3
Math C105	Intermediate Algebra	3
	Free Elective	3
Hum C201	Humanities I	3

SECOND SEMESTER

MIS 191	Computer Concepts I	3
Engl 202	Advanced Composition (for Business)	3
MS 110	Intro to Management Science	3
Acct 210	Accounting Systems and Controls	3
Hum C202	Humanities II	3

THIRD SEMESTER

SoSc C201	Social Science I	3
Econ 201	Principles of Economics - Macro	3
MS 115	Probability for Business	3
FA C101	Fine Arts	3
	Free Elective	3

FOURTH SEMESTER

Econ 202	Principles of Economics - Micro	3
Law 251	Business Law I	3
MS 120	Statistical Decision-Making for Business	3
IntSt C101	Integrated Studies/ Oral Communication	3
SoSc C202	Social Science II	3

FIFTH SEMESTER

Acct 331	Managerial Accounting	3
Fin 309	Managerial Finance	3
Mgmt 301	Operations Management	3
Mktg 305	Principles of Marketing	3
Sci C101	Natural Science I	3

SIXTH SEMESTER

Acct 327	Multinational Accounting	3
Fin 380	Multinational Finance	3
Mktg 342	Multinational Marketing	3
Mgmt 302	Multiculture Management	3
Sci C102	Natural Science II	3

SEVENTH SEMESTER

MIS 300	Management Information Systems	3
Acct 308	Financial Reporting and Analysis	3
Acct 329	Tax Law and Accounting	3
BuAd 382	Senior Project/Internship	3
	Free Elective	3

EIGHTH SEMESTER

Mgmt 350	Business Policy and Strategy	3
Econ 375	Multinational Economics	3
Caps C390	Capstone Seminar	3
	Major Electives	6

Total Semester Hours 120

Biology *Bachelor of Arts Degree*

Chair: Robert Singletary
Dana Hall, Room 147
(203) 576-4271

The Bachelor of Arts degree in Biology is for students who are seeking a broad liberal arts program. It is designed to allow students to obtain a minor that may be appropriate for their career aspirations. The training offered provides the student with the basic core preparation needed for further study in graduate school or immediately marketable training for industry or government service.

Students entering the program are initially listed as general biology majors. Upon satisfactory completion of two semesters, a student may elect to pursue a specific option in Biology such as Zoology, Ecology, Environmental Science, Marine Biology, Pre-Chiropractic or Pre-Naturopathy. Students interested in Pre-Medicine, Pre-Dentistry or Pre-Veterinary should pursue the Bachelor of Science degree.

ENVIRONMENTAL BIOLOGY

Students interested in pursuing a concentration in Ecology, Marine Ecology, and Environmental Science select for their elective biology courses those which are appropriate for their interest, e.g. marine ecology, invertebrate zoology, environmental health, animal behavior, microbiology, microbial ecology, and field work. Environmental Biology students should also participate in an intern or summer study program to gain practical experience in the field.

PRE-HEALTH PROFESSIONAL OPTIONS

A **Pre-Chiropractic** option is available to students who seek to attend chiropractic school. Students who choose this option may elect three years (90 credit hours) of course work at the University of Bridgeport and then transfer up to 30 credit hours of their basic science courses to chiropractic school to complete the degree. The university has articulation agreements with several chiropractic schools for preferred admission of students who follow the pre-chiropractic option.

The **Pre-Medicine, Pre-Naturopathic, Pre-Dentistry, and Pre-Veterinary** options prepare students for entry into professional schools in these fields. Students interested in these options should elect courses appropriate to their career interest: e.g. histology, microbiology, comparative anatomy, human embryology, parasitology, environmental health and immunology.

BIOLOGY MINOR

Students wishing to obtain a minor in Biology must take Biology 101, 102, 211, 323, and one additional Biology course of at least 3 credits at the 200 level or higher.

Summary of Requirements

PROGRAM REQUIREMENTS

Bio 101	General Biology I	4
Bio 102	General Biology II	4
Bio 211	General Physiology	4
Bio 307	Genetics	3
Bio 321	Cell Physiology	3
Bio 323	Ecology	4
Bio 392	Senior Project	3
	Biology Electives[1]	15
Chem 205	Organic Chemistry I	4
Chem 206	Organic Chemistry II	4
Phys 202	General Physics II	4
		52

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition & Rhetoric	3
Math 109	Precalculus	4
Hum C201	Humanities I	3
Hum C202	Humanities II	3
FA C101	Fine Arts	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
Chem 103	General Chemistry I	4
Chem 104	General Chemistry II	4
Phys 201	General Physics I	4
IntSt C101	Integrated Studies I	3
Caps C390	Capstone Seminar	3
		40

ELECTIVES **28**

Total Semester Hours **120**

Suggested Program

FRESHMAN YEAR and SOPHOMORE YEAR

Bio 101, 102	General Biology I & II	8
Bio 211	Physiology	4
Chem 103, 104	General Chemistry I & II	8
Bio 323	Ecology	4
Engl C101	Comp. & Rhetoric	3
Chem 205, 206	Organic Chemistry I & II	8
Math 109	Precalculus	4
FA C101	Fine Arts	3
Hum C201,C202	Humanities I & II	6
SoSc C201,C202	Social Science I & II	6
	Electives	8

JUNIOR YEAR and SENIOR YEAR

Bio 307	Genetics	3
Bio 392	Senior Project	3
Bio 321	Cell Physiology	3
Bio	Biology Electives [1]	15
Caps C390	Capstone Seminar	3
InSt C101	Integrated Studies	3
Phys 201/202	General Physics	8
	Electives [2]	20

Total Semester Hours **120**

[1]Biology and cognate courses at the 200 level or higher.

[2]Pre-Health professional students must take Psych. 103, General Psychology as one of the electives.

Biology *Bachelor of Science Degree*

Chair: Robert Singletary
Dana Hall, Room 142
(203) 576-4271

The Bachelor of Science degree in Biology is for students who wish to pursue a career that requires further study in graduate or professional school. Students interested in scientific research or one of the health professions should follow the B.S. degree program. The training offered provides the student with the basic core preparation needed for further study in graduate school, or immediately marketable training for industry or government service.

Students entering the program are initially listed as general biology majors. Upon satisfactory completion of two semesters, a student may elect to pursue a specific option in Biology such as Zoology, Ecology, Environmental Science, Marine Biology, Pre-Chiropractic, Pre-Naturopathy, Pre-Medicine, Pre-Dentistry or Pre-Veterinary.

ENVIRONMENTAL BIOLOGY

Students interested in pursuing a concentration in Ecology, Marine Ecology, and Environmental Science select for their elective biology courses those which are appropriate for their interest, e.g. marine ecology, invertebrate zoology, environmental health, animal behavior, microbiology, microbial ecology, and field work. Environmental Biology students should also participate in an intern or summer study program to gain practical experience in the field.

PRE-HEALTH PROFESSIONAL OPTIONS

A **Pre-Chiropractic** option is available to students who seek to attend chiropractic school. Students who choose this option may elect three years (90 credit hours) of course work at the University of Bridgeport and them transfer up to 30 credit hours of their basic science courses to chiropractic school to complete the degree. The university has articulation agreements with several chiropractic schools for preferred admission of students who follow the pre-chiropractic option.

The **Pre-Medicine, Pre-Naturopathic, Pre-Dentistry, and Pre-Veterinary** options prepare students for entry into professional schools in these fields. Students interested in these options should elect courses appropriate to their career interest: e.g. histology, microbiology, comparative anatomy, human embryology, parasitology, environmental health and immunology.

BIOLOGY MINOR

Students wishing to obtain a minor in Biology must take Biology 101, 102, 211, 323, and one additional Biology course of at least 3 credits at the 200 level or higher.

Summary of Requirements

PROGRAM REQUIREMENTS

Bio 101	General Biology I	4
Bio 102	General Biology II	4
Math 112	Calculus II	4
Bio 211	General Physiology	4
Bio 307	Genetics	3
Bio 321	Cell Physiology	3
Bio 323	Ecology	4
Bio 392	Senior Project	3
	Biology Elective [1]	23
Chem 205	Organic Chemistry I	4
Chem 206	Organic Chemistry II	4
Phys 202	General Physics II	4
		64

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition & Rhetoric	3
Math 110	Calculus I	4
Hum C201	Humanities I	3
Hum C202	Humanities II	3
FA C101	Fine Arts	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
Chem 103	General Chemistry I	4
Chem 104	General Chemistry II	4
Phys 201	General Physics I	4
IntSt C101	Integrated Studies I	3
Caps C390	Capstone Seminar	3
		40

ELECTIVES **16**

Total Semester Hours **120**

Suggested Program

FRESHMAN YEAR and SOPHOMORE YEAR

Bio 101, 102	General Biology I & II	8
Bio 211	Physiology	4
Chem 103	General Chemistry I & II	8
Bio 323	Ecology	4
Engl C101	Comp. & Rhetoric	3
Chem 205, 206	Organic Chemistry I & II	8
Math 110	Calculus	4
FA C101	Fine Arts	3
Hum C201,C202	Humanities I & II	6
Math 112	Calculus II	4
SoSc C201,C202	Social Science I & II	6

JUNIOR YEAR and SENIOR YEAR

Bio 307	Genetics	3
Bio 392	Senior Project	3
Bio 321	Cell Physiology	3
Bio	Biology Electives [1]	23
Caps C390	Capstone Seminar	3
IntSt C101	Integrated Studies	3
Phys 201, 202	General Physics I & II	8
	Electives [2]	16

Total Semester Hours **120**

[1]Biology and cognate courses at the 200 level or higher.

[2]Pre-Health professional students must take Psych 103, General Psychology, as one of the electives.

Business Administration *Associate in Arts Degree*

Advisor: William Greenspan
Mandeville Hall, Room 309
(203) 576-4378

The Associate in Arts in Business Administration provides options for students who want only two years of college study and students who are not certain about their degree objectives. Additionally, some students are recommended for the two-year program when it is expected to provide a better foundation for bachelor's degree study. All students successfully completing the A.A. degree program can apply their semester toward the bachelor's degree.

Two-year business study at the University of Bridgeport provides many advantages not usually available to junior college or two-year college students. All the resources of the university are available to two-year students as readily as for bachelor's, master's, and doctoral students. This includes planning/placement services and all of the social, sports and extracurricular activities of the campus. Students receive all the guidance and advising of a small, private two-year college, while completing their studies in the environment of a major university.

Summary of Requirements

PROGRAM REQUIREMENTS

Acct 101	Financial Accounting	3
MS 110	Intro to Management Science	3
MS 115	Probability for Business	3
MS 120	Statistical Decision-Making for Business	3
MIS 191	Computer Concepts	3
Acct 331	Managerial Accounting	3
Law 251	Business Law I	3
Mgmt 302	Multiculture Management	3
	Free Elective	3
		27

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition and Rhetoric I	3
IntSt C101	Integrated Studies/ Oral Communication	3
Econ 201	Principles of Economics - Macro	3
Econ 202	Principles of Economics - Micro	3
Engl 202	Advanced Composition (for Business)	3
Math C105	Intermediate Algebra	3
FA C101	Fine Arts	3
Hum C201, C202	Humanities I & II	6
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
		33

Total Semester Hours ____ **60**

Suggested Program

FIRST SEMESTER

Acct 101	Financial Accounting	3
Math C105	Intermediate Algebra	3
MIS 191	Computer Concepts	3
Engl C101	Composition and Rhetoric I	3
Hum C201	Humanities I	3

SECOND SEMESTER

Acct 331	Managerial Accounting	3
MS 110	Intro to Management Science	3
Engl 202	Advanced Composition (for Business)	3
	Elective	3
Hum C202	Humanities II	3

THIRD SEMESTER

MS 115	Probability for Business	3
Econ 201	Principles of Economics - Macro	3
SoSc C201	Social Science I	3
Law 251	Business Law I	3
FA C101	Fine Arts	3

FOURTH SEMESTER

MS 120	Statistical Decision-Making for Business	3
Mgmt 302	Multiculture Management	3
IntSt C101	Integrated Studies/ Oral Communications	3
Econ 202	Principles of Economics - Micro	3
SoSc C202	Social Science II	3

Total Semester Hours ____ **60**

Business Administration *Bachelor of Science Degree*

Advisor: William Greenspan
Mandeville Hall, Room 309
(203) 576-4378

The Business Administration major provides the maximum flexibility in course selection for a student to fulfill both personal and professional goals. Upon completion of University and College core requirements the student may pursue a myriad of unique combinations of study to satisfy either a general or specific purpose. This includes combining study from two or three of the major disciplines of study within the college including those disciplines not listed in this catalog such as Economics and Management Information Systems, and combinations with other colleges at the University. In all cases the study program of the student must be approved by the student's faculty advisor. Students interested in adding a Teacher Certification to a program in Business Administration can do so. A brief description of the teacher certification requirements appears elsewhere in this catalog under the Department of Education section.

The University Core Curriculum requires passing the mathematics competency exam or taking Mathematics 105. This competency is a prerequisite for Management Science 110 and 115. The Business Core requires passing a computer competency exam or taking Management Information Systems 191. Students anticipating graduate study in Business are advised to take calculus (Mathematics 106 or Management Science 140) as a free elective.

Upper Division coursework provides students with a common body of managerial knowledge, multinational business studies, study in a major field, and an internship or business development project. The concentration of professional courses in the last two years builds upon the broad-based analytical tools and liberal arts foundation of the first two years.

A student is admitted to the School of Business, through an evaluation of the high school transcript, class rank, and SAT scores, based on the determination that the student has demonstrated potential in analytical reasoning, comprehension and expression in words and creative power in thinking. Students transferring from undergraduate majors of other colleges must have a minimum quality point ratio of 2.5.

Management 350, Business Policy and Strategy, is the Capstone Course of this degree program. The final examination of this course shall constitute, therefore, an outcome assessment of what the student has learned in the program. This examination, normally an extensive and comprehensive case study, will be graded by several faculty members representing different and relevant disciplines.

Summary of Requirements

PROGRAM REQUIREMENTS

Acct 101	Financial Accounting	3
MS 110	Intro to Management Science	3
MIS 191	Computer Concepts	3
Law 251	Business Law I	3
MS 115	Probability for Business	3
MS 120	Statistical Decision-Making for Business	3
Acct 331	Managerial Accounting	3
Fin 309	Managerial Finance	3
Mgmt 301	Operations Management	3
MIS 300	Management Information Systems	3
Mktg 305	Principles of Marketing	3
Acct 327	Multinational Accounting	3
Econ 375	Multinational Economics	3
Fin 380	Multinational Finance	3
Mgmt 302	Multiculture Management	3
Mktg 342	Multinational Marketing	3
Mgmt 350	Business Policy and Strategy	3
BuAd 382	Senior Project/Internship	3
	*Business Electives	12
	Electives	12
		78

*Plus twelve semester hours in the major(s) selected from Accounting, Economics, Finance, International Business, Management Information Systems, Management and Entrepreneurial Studies, and Marketing

**Specific course requirements are described under each major description or course description section of this catalog.*

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition and Rhetoric I	3
IntSt C101	Integrated Studies/Oral Communication	3
Math C105	Intermediate Algebra	3
Sci C101, C102	Natural Science I & II	6
Hum C201, C202	Humanities I & II	6
Econ 201	Principles of Economics- Macro	3
Econ 202	Principles of Economics - Micro	3
Engl 202	Advanced Composition(for Business)	3
BuAd 102	Urban Management Studies	3
FA C101	Fine Arts	3
Caps C390	Capstone Seminar	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
		42

Total Semester Hours ____ **120**

Suggested Program

FIRST SEMESTER

Acct 101	Financial Accounting	3
Engl C101	Composition and Rhetoric I	3
Math C105	Intermediate Algebra I	3
Hum C201	Humanities I	3
	Free Elective	3

SECOND SEMESTER

MIS 191	Computer Concepts I	3
Engl 202	Advanced Composition (for Business)	3
MS 110	Introduction to Management Science	3
	Free Elective	3
Hum C202	Humanities II	3

THIRD SEMESTER

Econ 201	Principles of Economics - Macro	3
MS 115	Probability for Business	3
SoSc C201	Social Science I	3
	Free Elective	3
FA C101	Fine Arts	3

FOURTH SEMESTER

Econ 202	Principles of Economics - Micro	3
MS 120	Statistical Decision-Making for Business	3
Law 251	Business Law I	3
IntSt C101	Integrated Studies/ Oral Communication	3
SoSc C202	Social Science II	3

FIFTH SEMESTER

Acct 331	Managerial Accounting	3
Fin 309	Managerial Finance	3
Mktg 305	Principles of Marketing	3
Mgmt 301	Operations Management	3
Sci C101	Natural Science I	3

SIXTH SEMESTER

Acct 327	Multinational Accounting	3
Fin 380	Multinational Finance	3
Mktg 342	Multinational Marketing	3
Mgmt 302	Multiculture Management	3
Sci C102	Natural Science II	3

SEVENTH SEMESTER

MIS 300	Management Information Systems	3
BuAd 382	Senior Project/Internship	3
	Major Electives	6
	Free Elective	3

EIGHTH SEMESTER

Econ 375	Multinational Economics	3
Mgmt 350	Business Policy and Strategy [3]	3
Caps C390	Capstone Seminar	3
	Major Electives	6

Total Semester Hours ____ **120**

Business Administration/Legal Administration *Bachelor of Science Degree*

Advisor: William Greenspan
Mandeville Hall, Room 309
(203) 576-4378

Chair: Rudolph Sommer
Dana Hall, Room 130
(203) 576-4641

A Bachelor of Science Degree in Business Administration/Legal Administration provides a unique educational background for a management/law career, as well as opportunity for graduate study in management and/or in law.

The intricacies of law are causing organizational changes in many areas. Corporate legal departments need people who know management and law. Expanding law offices need managers to free lawyers' time for those functions which only attorneys can perform.

Summary Requirements

PROGRAM REQUIREMENTS

Acct 101	Financial Accounting	3
MS 110	Intro to Management Science	3
MS 115	Probability for Business	3
MS 120	Statistical Decision-Making	3
Fin 309	Managerial Finance	3
Mgmt 302	Multiculture Management	3
Acct 331	Managerial Accounting	3
Mgmt 301	Operations Management	3
Mktg 305	Principles of Marketing	3
MIS 300	Management Information Systems	3
Acct 327	Multinational Accounting	3
Econ 375	Multinational Economics	3
Fin 380	Multinational Finance	3
Mktg 342	Multinational Marketing	3
Mgmt 350	Business Policy and Strategy	3
LAS 102	Legal Research	3
LAS 305	Computer Technology in the Law Office	3
LAS 307	Litigation	3
LAS 101	Criminal Law	2
LAS 105	Torts	2
LAS 103	Contracts/ U.C.C.	3
LAS 104	Legal Writing	3
LAS 205	Business Organizations	3
LAS 206	Property/Conveyance	4
LAS 208	Estate/Probate/Tax	3
	Liberal Arts Electives	4
		78

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition and Rhetoric I	3
IntSt C101	Integrated Studies/ Oral Communication	3
Math C105	Intermediate Algebra	3
Econ 201	Principles of Economics - Macro	3
Econ 202	Principles of Economics - Micro	3
Sci C101, C102	Natural Science I & II	6
Hum C201	Humanities I	3
Hum C202	Humanities II	3
FA C101	Fine Arts	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
Caps C390	Capstone Seminar	3
Engl 202	Advanced Composition (for Business)	3
		42

Total Semester Hours ____ **120**

Suggested Program

FIRST SEMESTER

Engl C101	Composition and Rhetoric I	3
LAS 102	Legal Research	3
LAS 305	Computer Technology in the Law Office	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3

SECOND SEMESTER

LAS 101	Criminal Law	2
LAS 105	Torts	2
MS 110	Introduction to Management Science	3
Acct 101	Financial Accounting	3
Hum C202	Humanities II	3
	Liberal Arts Elective	2

THIRD SEMESTER

MS 115	Probability for Business	3
LAS 103	Contracts/ U.C.C.	3
LAS 104	Legal Writing	3
SoSc C201	Social Science I	3
FA C101	Fine Arts	3

FOURTH SEMESTER

MS 120	Statistical Decision-Making for Business	3
Econ 201	Principles of Economics - Macro	3
LAS 205	Business Organizations	3
SoSc C202	Social Science II	3
IntSt C101	Integrated Studies/Oral Communication	3

FIFTH SEMESTER

LAS 206	Property/Conveyance	4
Econ 202	Principles of Economics - Micro	3
Acct 331	Managerial Accounting	3
Sci C101	Natural Science I	3
	Liberal Arts Elective	2

SIXTH SEMESTER

LAS 208	Estate/Probate/Tax	3
Fin 309	Managerial Finance	3
Mgmt 302	Multiculture Management	3
Mktg 305	Principles of Marketing	3
Sci C102	Natural Science II	3

SEVENTH SEMESTER

LAS 307	Litigation	3
Caps C390	Capstone Seminar	3
Mgmt 301	Operations Management	3
MIS 300	Management Information Systems	3
Acct 327	Multinational Accounting	3

EIGHTH SEMESTER

Econ 375	Multinational Economics	3
Fin 380	Multinational Finance	3
Mktg 342	Multinational Marketing	3
Mgmt 350	Business Policy and Strategy	3
Engl 202	Advanced Composition for Business	3

Total Semester Hours ____ **120**

Pre-Chiropractic Programs

In addition to the Pre-Chiropractic option, the University offers two Pre-Chiropractic Programs to students who wish to complete the prerequisites for the Doctor of Chiropractic Program. These programs fulfill prerequisites for all Chiropractic Colleges in the U.S. and Canada, including the University of Bridgeport College of Chiropractic.

Accelerated Science Program

An Accelerated Science Program allows students who already have a Bachelor's degree to complete their prerequisite science courses in two semesters. These consist of:

Anatomy & Physiology I and II
General Chemistry I and II
Organic Chemistry I and II
Physics I and II

General Biology and General Chemistry are typically offered in the Spring and Summer semesters. Organic Chemistry and Physics are offered in the Summer and Fall semesters. For a class schedule, please contact the Chiropractic Admissions Office at (203) 576-4352.

SCIENCE REQUIREMENTS

Anatomy & Physiology 113, 114
8 Semester Hours

General Chemistry 103, 104
8 Semester Hours

Organic Chemistry 205, 206
8 Semester Hours

General Physics 201, 202
8 Semester Hours

Pre-Chiropractic/ Bachelor's Degree Program

The University of Bridgeport College of Graduate and Undergraduate Studies offers a seven-year coordinate Program leading to a combined Bachelor of Science and Doctor of Chiropractic degree. Students enrolled in the program complete three years (ninety credits) of undergraduate coursework, including all required core courses in the University of Bridgeport curriculum. Students who successfully complete their first three years at the University of Bridgeport, and who comply with the requirements for admission to the University of Bridgeport College of Chiropractic described below may be granted admission into the University of Bridgeport College of Chiropractic. To be accepted for the Doctor of Chiropractic Degree Program at the University of Bridgeport College of Chiropractic, the student must:

- Maintain a minimum grade point average of 2.5 with a minimum grade of "C" in all undergraduate courses required by the University of Bridgeport College of Chiropractic.**
- Schedule a meeting with the Director of Admissions of the University of Bridgeport College of Chiropractic immediately upon matriculation at the University of Bridgeport, indicating intent to continue into the Doctor of Chiropractic Program upon completion of prerequisite undergraduate study. Pre-chiropractic advisement will be coordinated with the student's undergraduate advisor.
- Submit an application for admission to the Director of Admissions of the University of Bridgeport College of Chiropractic prior to registering for the fifth semester of pre-chiropractic study at the University of Bridgeport.
- Successfully complete a personal interview with members of the Admissions Committee of the University of Bridgeport College of Chiropractic during the final semester of pre-chiropractic study.

** *Students in this program who complete the requirements for admission into the College of Chiropractic with a grade point average of 3.0 or higher and a grade of "B" or better in each of the science prerequisites will be granted preferred status for admission into the University of Bridgeport College of Chiropractic for the entry date of their choice.*

Pre-Chiropractic *Combined Bachelor of Science (Biology) or Bachelor of Elective Studies and Doctor of Chiropractic (D.C.) Degree Program*

The University of Bridgeport College of Graduate and Undergraduate Studies, in conjunction with the College of Chiropractic, offers a program whereby a student majoring in a B.A. or B.S. degree program in biology or a B.E.S. degree in elective studies, who completes 90 semester hours toward the Bachelor's degree as an undergraduate, and who is accepted and matriculates into the D.C. degree program in the College of Chiropractic, may utilize 30 semester hours of basic science courses in the Chiropractic curriculum to complete the degree requirements for the B.A./B.S. Biology degree or the B.E.S. degree during his/her Chiropractic study. The following policies are applicable:

1. The College of Chiropractic may accept students from B.A./B.S. Biology programs or B.E.S. programs who have successfully completed the requirements for entrance into the Chiropractic program as noted below:
   a. Completion of 90 semester hours of undergraduate course work with a minimum grade point average of 2.5 on a 4.0 scale. In addition to this, the cumulative grade point average must be competitive with other applicants vying for seats in the College of Chiropractic.
   b. Successful completion of the following courses:

      Mass Communication C101
      3 Semester Hours

      English C101/C102
      6 Semester Hours

      Psychology 103
      3 Semester Hours

      Social Science C201
      3 Semester Hours

      Humanities C201
      3 Semester Hours

      Electives (Social Studies/Humanities)
      9 Semester Hours

      Biology 101, 102 or 113,114
      8 Semester Hours

      General Chemistry 103, 104
      8 Semester Hours

      Organic Chemistry 205, 206
      8 Semester Hours

      General Physics 201, 202
      8 Semester Hours

NOTE: These courses and course areas are required for the B.A. or B.S. degree in Biology or the B.E.S. degree and are normally taken during the first three years of undergraduate study.

In order to meet the minimum requirements for entrance into the Doctor of Chiropractic Program:

- All biology/zoology, chemistry, organic chemistry and physics courses listed must be passed with a grade of "C" (2.00 on a 4.00 scale) or better. Grade point average in the 32 credit hours of science work must be a minimum of 2.25 on a 4.00 scale. Cumulative grade point average must be a minimum of 2.5 on a 4.00. A limited number of applicants are selected for admission into the College of Chiropractic each August and January. Selections are made by the Committee on Admissions for the College of Chiropractic. Selections are based on the results of thorough evaluations of each applicant's academic achievement, letters of recommendation, formal interview and essay. Courses strongly recommended for Pre-Chiropractic students include English Composition C101 and C102, a statistics course, an introduction to computers, logic, anatomy and physiology.

2. The following list of basic science courses offered by the College of Chiropractic will meet the final 30 semester hours requirements for the B.A. or B.S. degree in Biology according to the equivalencies listed below, provided that:
   a. The student earns a grade of "C" or better in at least 30 of the 50 semester hours of the Chiropractic program listed below; and
   b. The equivalent course in Biology has not been taken as part of the 90 semester hours undergraduate program package; and
   c. No more than 8 semester hours of the 30 used towards a degree in Biology are selected from the Anatomy courses below.

Students who are accepted into the Doctor of Chiropractic Program and who successfully complete a specified set of courses offered during the first two to three semesters at the University of Bridgeport College of Chiropractic with a grade point average of 2.50 will receive the Bachelor of Science degree or the Bachelor of Elective Studies degree upon completion of the application for graduation from the University of Bridgeport.

	COURSE	LECTURE	LAB HRS	SEMESTER HOURS	
AN 511	Histology	3	2	90	4
AN 512	Functional Anatomy and Biomechanics I: Spine	3	4	126	5
BC 511	Biochemistry, Metabolism and Nutrition	3	2	90	4
AN 513	General Anatomy I: Viscera	3	3	108	4.5
AN 514	Embryology I	1	0	18	1
PH 521	Physiology I	2	2	72	3
NS 521	Neuroscience I	2	2	72	3
AN 525	General Anatomy II: Head and Neck	3	3	108	4.5
AN 526	Functional Anatomy and Biomechanics II: Extremities	3	4	126	5
AN 527	Embryology II	1	0	18	1
NS 612	Neuroscience II	4	2	108	5
PH 612	Physiology II	4	2	108	5
MB 621	Microbiology	4	2	108	5
		36	28	1152	50

3. The B.E.S. in Elective Studies or the B.A. or B.S. degree in Biology will be awarded by the College of Graduate and Undergraduate Studies upon satisfactory completion of 30 semester hours of basic science Chiropractic courses. Requirements for completion of the B.A. or B.S. degree in Biology are listed under Biology.

   Requirements for completion of the B.E.S. degree are listed under Elective Studies.

Requirements for admission are further described in the College of Chiropractic section of this catalog.

Pre-Naturopathic Program

The University of Bridgeport offers two naturopathic pre-professional programs:

"Pre-Naturopathic" Program

This is an undergraduate degree program for interested students without a bachelor's degree. It is recommended that students in the pre-naturopathic program major in biology or elective studies.

"Accelerated Sciences" Program

In addition to the Pre-Naturopathic option available to undergraduate students with declared majors, the University offers an accelerated science program to students who have already earned their baccalaureate degree but do not have the required sciences to enter the Doctor of Naturopathic Medicine degree program.

This program allows those with a baccalaureate degree to complete their prerequisite science courses on an accelerated basis as non-matriculated students. These prerequisites consist of:

General Biology I and II

General Chemistry I and II

Organic Chemistry I and II

Physics I and II

General Biology and General Chemistry are typically offered in the Spring and Summer semesters. Organic Chemistry and Physics are offered in the Summer and Fall semesters. This allows most students to complete the science prerequisites in two semesters or less.

The University of Bridgeport courses offered to meet the Science Requirements are:

General Biology 101, 102
8 Semester Hours

General Chemistry 103, 104
8 Semester Hours

Organic Chemistry 205, 206
8 Semester Hours

General Physics 201, 202
8 Semester Hours

For a class schedule, please contact the College of Naturopathic Medicine Admission Office at (203) 576-4109.

Computer Applications & Information Systems *Bachelor of Science Degree*

Advisor: William Greenspan
Mandeville Hall, Room 309
(203) 576-4378

The Computer Applications and Information Systems (CAIS) major prepares students for challenging new opportunities made available by the information-driven business world in the coming age of information super-highways. The integration of information processing, telecommunication technologies and the networking of computer systems will continue to broaden the applications of computer information systems in many areas of the decision-making process.

While the emphasis is on the management of integrated and networked business systems, a solid base of programming, database, and systems design skills are provided. The successful CAIS students will be capable of attending to details without losing sight of the large aim of achieving corporate goals. The skills acquired in this program include specification, evaluation, and integration of networkable software and the management and upgrading of existing systems.

The University Core Curriculum requires passing the mathematics competency exam or taking Mathematics 105. This competency is a prerequisite for Management Science 110 and 115. The Business Core requires passing a computer competency exam or taking Management Information Systems 191. Students anticipating graduate study in Business are advised to take calculus (Mathematics 106 or Management Science 140) as a free elective.

Upper Division coursework provides students with a common body of managerial knowledge, multinational business studies, study in a major field, and an internship or business development project. The concentration of professional courses in the last two years builds upon the broad-based analytical tools and liberal arts foundation of the first two years.

A student is admitted to the School of Business, through an evaluation of the high school transcript, class rank, and SAT scores, based on the determination that the student has demonstrated potential in analytical reasoning, comprehension and expression in words and creative power in thinking. Students transferring from undergraduate majors of other colleges must have a minimum quality point ratio of 2.5.

Management 350, Business Policy and Strategy, is the Capstone Course of this degree program. The final examination of this course shall constitute, therefore, an outcome assessment of what the student has learned in the program. This examination, normally an extensive and comprehensive case study, will be graded by several faculty members representing different and relevant disciplines.

Summary of Requirements

PROGRAM REQUIREMENTS

Acct 101	Financial Accounting	3
MS 110	Intro. to Management Science	3
MIS 191	Computer Concepts	3
Law 251	Business Law I	3
MS 115	Probability for Business	3
MS 120	Statistical Decision-Making for Business	3
Acct 331	Managerial Accounting	3
Fin 309	Managerial Finance	3
Mgmt 301	Operations Management	3
MIS 300	Management Information Systems	3
Mktg 305	Principles of Marketing	3
Acct 327	Multinational Accounting	3
Econ 375	Multinational Economics	3
Fin 380	Multinational Finance	3
Mgmt 302	Multiculture Management	3
Mktg 342	Multinational Marketing	3
Mgmt 350	Business Policy and Strategy	3
BuAd 382	Senior Project/Internship	3
		54

Plus twelve semester hours of CAIS electives selected from:

MIS 291	Business Applications Programming	3
MIS 304	Introduction to Database	3
MIS 311	Selected Topics in Applications Programming	3
MIS 320	Inform. Systems Analysis and Design	3
MIS 325	Selected Topics in Inform. Systems Analysis and Design	3
MIS 357	Telecommunications	3
MIS 356	Expert Systems	3
		12

FREE ELECTIVES 12

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition & Rhetoric I	3
IntSt C101	Integrated Studies/ Oral Communications	3
Math 105	Intermediate Algebra	3
Sci C101, C102	Natural Science I & II	6
Hum C201	Humanities I	3
Hum C202	Humanities II	3
Econ 201	Principles of Economics - Macro	3
Econ 202	Principles of Economics - Micro	3
Engl 202	Advanced Composition (for Business)	3
FA C101	Fine Arts	3
Caps C390	Capstone Seminar	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
		42

Total Semester Hours 120

Suggested Program

FIRST SEMESTER

Acct 101	Financial Accounting	3
Engl C100/101	Composition & Rhetoric I	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
	Free Elective	3

SECOND SEMESTER

MIS 191	Computer Concepts	3
Engl 202	Advanced Composition (for Business)	3
MS 110	Introduction to Management Science	3
	Free Elective	3
Hum C202	Humanities II	3

THIRD SEMESTER

Econ 201	Principles of Economics - Macro	3
MS 115	Probability for Business	3
SoSc C201	Social Science I	3
	Free Elective	3
FA C101	Fine Arts	3

FOURTH SEMESTER

Econ 202	Principles of Economics - Micro	3
MS 120	Statistical Decision-Making for Business	3
Law 251	Business Law I	3
IntSt C101	Integrated Studies/ Oral Communications	3
SoSc C202	Social Science II	3

FIFTH SEMESTER

Acct 331	Managerial Accounting	3
Fin 309	Managerial Finance	3
Mktg 305	Principles of Marketing	3
Mgmt 301	Operations Management	3
Sci C101	Natural Science I	3

SIXTH SEMESTER

Acct 327	Multinational Accounting	3
Fin 380	Multinational Finance	3
Mktg 342	Multinational Marketing	3
Mgmt 302	Multiculture Management	3
Sci C102	Natural Science II	3

SEVENTH SEMESTER

MIS 300	Management Information Systems	3
BuAd 382	Senior Project/Internship	3
	Major Electives	6
	Free Elective	3

EIGHTH SEMESTER

Econ 375	Multinational Economics	3
Mgmt 350	Business Policy and Strategy	3
Caps C390	Capstone Seminar	3
	Major Electives	6

Total Semester Hours 120

Computer Engineering *Bachelor of Science Degree*

Chair: Stephen Grodzinsky
Dana Science Hall, Room 258
(203) 576-4145

The ever-increasing use of the computer in today's world offers expanding opportunities in this field of specialization. This program provides a bridge between the disciplines of electrical engineering and computer science. Graduates can enter such fields as chip design, software engineering, robotics, and a variety of computer-controlled applications. This requires the development of the engineering approach through the understanding of engineering mathematics, digital and analog electronics and control, as well as computer languages, computing theory and computer architecture. Design and problem-solving form the heart of the discipline and a variety of computer-aided design (CAD) tools are utilized to facilitate learning and implementation.

The graduate from this program will obtain the basic education in the first three years. The final year is utilized to explore specific areas of interest. One can choose a software-oriented program including such areas as artificial intelligence, knowledge-based systems and software design or a hardware-oriented program pointing toward computer or integrated circuit design, robotics and networking.

The engineering approach and knowledge of computer structure are the attributes that make it unique. This program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology. A total of 128 semester hours are required for graduation.

Summary of Requirements

ENGINEERING CORE REQUIREMENTS

Chem 103	General Chemistry I	4
CpE 210	Digital System Design I	3
CpE 386	Microprocessor System Design	4
CS 101	Introduction to Computing I	3
EE 233/234	Electrical Engineering I and II w/lab	8
EE 333	Signals and Systems	3
Engr 111/112	Introduction to Engineering I & II	5
Engr 300	Econ. and Management of Engr Project	1
Math 215	Calculus III	4
Math 301	Differential Equations	3
Math 323	Probability and Statistics	3
ME 208	Introduction to Thermal Engineering	3
		44

PROGRAM REQUIREMENTS

CpE 306/389	Compiler Design/Software Engr	3
CpE 308	Operating Systems	3
CpE 312	Computer Organization	3
CpE 315	Digital Systems Design II w/lab	4
CpE 349	CpE Senior Design Project	3
CS 102	Introduction to Computing II (Data Structures)	3
CS 227	Discrete Structures	3
EE 348	Electronic Circuits I	3
Math 214/314	Linear Algebra/Numerical Analysis	3
	Technical Electives (3)	9
	Free Elective	3
		40

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition & Rhetoric I	3
Math 110	Calculus I	4
Math 112	Calculus II	4
Phys 107, 108, 209	Principles of Physics I, II, III	12
Hum C201	Humanities I	3
Hum C202	Humanities II	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
IntSt C101	Integrated Studies/Oral Communication	3
FA C101	Fine Arts	3
Caps C390	Capstone Seminar	3
		44

Total Semester Hours **128**

Suggested Program

FIRST SEMESTER

Engl C101	Composition & Rhetoric I	3
Math 110	Calculus I	4
Chem103	General Chemistry I	4
CS 101	Introduction to Computing I	3
Engr 111	Introduction to Engineering I	3

SECOND SEMESTER

IntSt C101	Integrated Studies I	3
Math 112	Calculus II	4
Phys 107	Principles of Physics I	4
CS 102	Intro. to Computing II (Data Structures)	3
Engr 112	Introduction to Engineering II	2

THIRD SEMESTER

Math 215	Calculus III	4
Phys 108	Principles of Physics II	4
EE 223	Electrical Engineering I w/lab	4
Hum C201	Humanities I	3

FOURTH SEMESTER

Math 301	Differential Equations	3
Phys 209	Principles of Physics III	4
EE 224	Electrical Engineering II w/lab	4
Hum C202	Humanities II	3
CpE 210	Digital System Design I	3

FIFTH SEMESTER

Engr 300	Econ. and Management of Engr Proj.	1
Math 323	Probability and Statistics	3
CS 227	Discrete Structures	3
EE 348	Electronic Circuits I	3
SoSc C201	Social Science I	3
CpE 315	Digital Systems Design II w/lab	4

SIXTH SEMESTER

CpE 386	Microprocessor System Design	4
Math 214/314	Linear Algebra/Numerical Analysis	3
CpE 312	Computer Organization	3
EE 333	Signals and Systems	3
SoSc C202	Social Science II	3

SEVENTH SEMESTER

	Tech Elective	3
CpE 308	Operating Systems	3
CpE 306/389	Compiler Design/Software Engr	3
ME 208	Introduction to Thermal Engineering	3
FA C101	Fine Arts	3

EIGHTH SEMESTER

CpE 349	CpE Senior Design Project	3
Caps C390	Capstone Seminar	3
	Tech Electives	6
	Free Elective	3

Total Semester Hours **128**

Computer Science *Bachelor of Science Degree*

Chair: Stephen Grodzinsky
Dana Science Hall, Room 258
(203) 576-4145

The rapid proliferation of computers in our society makes the need for well-trained computer specialists increasingly important. The goal of the computer science program is to prepare the student to solve theoretical and applied problems encountered in scientific, commercial, and systems environments.

The computer science curriculum couples course work with a technical emphasis option that enables the student to explore many fields related to computing. Computer science core courses may be complemented with a course sequence from the fields of business administration, mathematics, engineering, or science. A total of 128 semester hours is required for graduation.

Summary of Requirements

PROGRAM REQUIREMENTS

CS 102	Introduction to Computing II (Data Structures)	3
CS 211	Instrumentation Lab	1
CS 227	Discrete Structures	3
CS 306	Compiler Design	3
CS 320	Theory of Computation	3
CS 340	Queueing Theory	3
CS 349	CS Senior Design Project	3
CpE 308	Operating Systems	3
CpE 389	Software Engineering	3
Math 214	Linear Algebra	3
Math 314	Numerical Analysis	3
	Technical Electives (3)	9
	Free Elective	3
		43

CORE REQUIREMENTS

CpE 210	Digital System Design I	3
CpE 386	Microprocessor System Design	4
CS 101	Introduction to Computing I	3
Engr 111/112	Introduction to Engineering I & II	5
Engr 300	Econ. and Management of Engr Proj.	1
Math 215	Calculus III	4
Math 323	Probability and Statistics	3
	Technical Electives	18
		41

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition & Rhetoric I	3
Math 110/112	Calculus I & II	8
Phys 107, 108, 209	Principles of Physics I, II, III	12
Hum C201/C202	Humanities I & II	6
SoSc C201/C202	Social Science I & II	6
	Humanities/Social Science Elective	3
FA C101	Fine Arts	3
Caps C390	Capstone Seminar	3
		44

Total Semester Hours 128

Suggested Program

FIRST SEMESTER

Engl C101	Composition & Rhetoric I	3
Math 110	Calculus I	4
CS 101	Introduction to Computing I	3
Engr 111	Introduction to Engineering I	3
Hum C201	Humanities I	3

SECOND SEMESTER

Math 112	Calculus II	4
Phys 107	Principles of Physics I	4
CS 102	Intro. to Computing II (Data Structures)	3
Engr 112	Introduction to Engineering II	2
Hum C202	Humanities II	3

THIRD SEMESTER

CS 227	Discrete Structures	3
Math 215	Linear Algebra	4
Phys 108	Principles of Physics II	4
SoSc C201	Social Science I	3
	Tech Emph Elec	3

FOURTH SEMESTER

Math 214	Differential Equations	3
Phys 209	Principles of Physics III	4
CS 211	Inst Lab	1
SoSc C202	Social Science II	3
CpE 210	Digital System Design I	3
	Tech Emph Elec	3

FIFTH SEMESTER

Engr 300	Econ. and Management of Engr Proj.	1
Math 323	Probability and Statistics	3
CS 306	Compiler Design	3
CS 320	Theory of Computation	3
Math 314	Numerical Methods	3
	Tech Emph Elec	3

SIXTH SEMESTER

CpE 386	Microprocessor System Design	4
FA C101	Fine Arts	3
	Tech Elec I	3
CS 340	Queuing Theory	3
	Tech Emph Elec	3

SEVENTH SEMESTER

CS 349	Senior Project	3
CpE 308	Operating Systems	3
CpE 389	Software Engineering	3
IntSt C101	Integrated Studies/Oral Communication	3
	Tech Emph Elec	3

EIGHTH SEMESTER

	Tech Elec 2	3
Caps C390	Capstone Seminar	3
	Tech Elective	3
	Free Elective	3
	Tech Emph Elective	3

Total Semester Hours 128

Dental Hygiene *Associate in Science Degree*

Director: Jocelyne Poisson
E.N.D. Hall, Room 201B
(203) 576-4138

The two-year curriculum of the Fones School combines courses from the College of Undergraduate and Graduate Studies and the Fones School of Dental Hygiene to provide a broad educational preparation. In addition to basic and dental science theory, the program provides education in prevention service and dental health education.

Dental Hygiene clinic uniforms, instruments and supplies are issued through the Fones School. These items are distributed throughout the clinical phase of the curriculum, the costs of which are included within the Dental Hygiene special fees.

During the second year, the students receive clinical education, not only at the Fones Dental Health Center on campus, but also through assignments at clinical and educational facilities of school dental health programs, hospitals and community agencies. These assignments are directly supervised by Fones faculty. Students are responsible for providing their own transportation to community agencies.

All courses listed in the program display for the Associate and/or Bachelor of Science degree are required for graduation. The Dental Hygiene student must earn a grade of "C" in all major courses. A student that earns a grade of C- or below in a course in the major field, must obtain a written statement from the School Director specifying the procedure necessary to remedy the deficiency and remain in the major.

Enrollment in the second year is contingent on completing all first year requirements and achieving a cumulative QPR of 2.0

Qualifications and procedures required of applicants to the Fones School are the same as those described in the chapter on Admissions. Dental Hygiene clinical courses begin in the fall term and the Associate's degree curriculum is open only to full-time Dental Hygiene students. Clinical students are required to submit a physical, dental and visual acuity report on an annual basis.

Summary of Requirements

PROGRAM REQUIREMENTS

DH 123	Oral Anatomy and Embryology I	4
DH 124	Radiology	3
DH 129	Clinical Practice I	3
DH 130	Clinical Practice II	4
DH 223	Pharmacology for the Dental Hygienist	2
DH 227	Clinical Practice III	5
DH 228	Clinical Practice IV	5
DH 232	Community Dental Health	4
DH233	General and Oral Histo-Pathology	3
DH 241	Periodontology	2
DH 250	Dental Materials	3
Nut 204	Principles of Nutrition	2
Bio 106	Elementary Microbiology	3
Chem 114	Introduction to Biochemistry	4
		47

GENERAL EDUCATION REQUIREMENTS

Bio 113-114	Anatomy and Physiology I/II	8
Educ 296	Micro Computer Utilization	1
Engl C101	Composition & Rhetoric	3
IntSt C101	Media Aesthetics	3
Math 105	Intermediate Algebra	3
SoSc C201	Social Science I	3
Soc 101	Principles of Sociology	3
	Elective	3
		27

Total Semester Hours 74

Suggested Program

FIRST SEMESTER

DH 123	Oral Anatomy	4
DH 129	Clinical Practice	3
Bio 113	Anat. & Phys. I	4
Chem 113	Bio Chem	4
Engl C101	Composition & Rhetoric	3

SECOND SEMESTER

DH 130	Clinical Practice II	4
DH 124	Radiology	3
Bio 114	Anat. & Phys. II	4
Bio 106	Microbiology	3
Educ 296	Micro Computer Utilization	1
SoSc C201	Social Science I	3

SUMMER

Math 105	Intermediate Algebra	3

THIRD SEMESTER

DH 223	Pharmacology	2
DH 227	Clinical Practice III	5
DH 232	Community Dental Health	4
DH 233	Gen. Hist Path	3
DH 241	Periodontology	2
Nut 204	Principles of Nutrition	2

FOURTH SEMESTER

DH 250	Dental Materials	3
DH 228	Clinical Practice IV	5
IntSt C101	Media Aesthetics	3
Soc 101	Sociology	3
	Elective	3

Total Semester Hours 74

Dental Hygiene *Bachelor of Science Degree*

Director: Jocelyne Poisson
E.N.D. Hall, Room 201B
(203) 576-4138

Students in the Bachelor of Science Degree (B.S.) may integrate bachelor's courses with the clinical aspect of the Dental Hygiene curriculum or pursue a baccalaureate degree (B.S.) after completing clinical preparation at the Associate of Science/Certificate Level. This baccalaureate degree completion approach is available to Fones' students as well as graduates of a Dental Hygiene program that is accredited by a specialized accrediting agency recognized by the United States Department of Education.

Education at the baccalaureate level enhances the dental hygienist' opportunities, abilities, background and values. The professional dental hygiene curriculum is combined with a liberal arts education. Upon satisfactory completion of semester hours in the areas of study specified, the student will be recommended for the degree of Bachelor of Science in Dental Hygiene.

General Education Track

This program option has been developed for those students who have semester hours beyond the Associate's degree and are interested in a broad general education. Students have the opportunity to shape their own curriculum to meet personal career goals. The outcome of this planning process is an individualized program that enables the dental hygienist to gain desired knowledge and skills and directly transfer this expertise to a professional work setting. Students may identify a minor in such areas as human services, marketing and paralegal to name a few.

Summary of Requirements

PROGRAM REQUIREMENTS

DH 123	Oral Anatomy & Embryology I	4
DH 124	Radiology	3
DH 129	Clinical Practice I	3
DH 130	Clinical Practice II	4
DH 223	Pharmacology for the Dental Hygienist	2
DH 227	Clinical Practice III	5
DH 228	Clinical Practice IV	5
DH 232	Community Dental Health	4
DH 233	General & Oral Histo-Pathology	3
DH 241	Periodontology	2
DH 250	Dental Materials	3
DH 302	Instructional Strategies for the Health Professional	3
DH 303	Oral Medicine	3
DH 305	Dental Hygiene Research	3
DH 306	Contemporary Dental Hygiene Practice	4
Nut 204	Principles of Nutrition	2
Bio 106	Elementary Microbiology	3
Mgmt 300	Behavior Sciences in Management	3
Mktg 305	Principles of Marketing	3
MIS 300	Management Information Systems	3
Educ 296	MicroComputer Utilization	1
		66

GENERAL EDUCATION REQUIREMENTS

Chem 114	Introduction to Biochemistry	4
Bio 113-114	Anatomy & Physiology I/II	8
Caps C390	Capstone Seminar	3
SoSc C201/202	Social Sciences I & II	6
Engl C101	Composition & Rhetoric	3
FA C101	Fine Arts	3
Hum C201/202	Humanities I & II	6
Math C105	Intermediate Algebra	3
Soc 101	Principles of Sociology	3
IntSt C101	Intergrated Studies	3
		42

ELECTIVES 12

Total Semester Hours 120

Suggested Program

FIRST SEMESTER

DH 123	Oral Anatomy & Embryology I	4
DH 129	Clinical Practice I	3
Bio 113	Anatomy & Physiology I	4
Chem 114	Introduction to Biochemistry	4
Engl C101	Composition & Rhetoric	3

SECOND SEMESTER

DH 130	Clinical Practice II	4
DH 124	Radiology	3
Bio 114	Anatomy & Physiology II	4
Bio 106	Microbiology	3
Educ 296	Micro Computers & their Utilizations	1
SoSc C201	Social Science I	3

SUMMER

Math 105	Intermediate Algebra	3

THIRD SEMESTER

DH 223	Pharmacology	2
DH 227	Clin Prac III	5
DH 232	Community Dental Health	4
DH 233	Gen Hist Path	3
DH 241	Periodontiology	2
Nut 204	Principles ofNutrition	2

FOURTH SEMESTER

DH 250	Dental Materials	3
DH 228	Clin Pract IV	5
Soc 101	Sociology	3
InSt C101	Integrated Studies	3
	Elective	3

FIFTH SEMESTER

Hum C201	Humanities I	3
DH 302	Instructional Strategies for the Health Professional	3
DH 303	Oral Medicine	3
FA C101	Fine Arts	3

SIXTH SEMESTER

Hum C202	Humanities II	3
DH 305	Dental Hygiene Research	3
Mktg 305	Principles of Marketing	3
SoSc C202	Social Science II	3

SEVENTH SEMESTER

MIS 300	Management Information Systems	3
Mgmt 300	Behavior Science in Management	3
	Electives	6

EIGHTH SEMESTER

DH 306	Contemporary Dental Hygiene Practice	4
	Elective	3
Caps C390	Capstone Seminar	3

Total Semester Hours 120

Education *Minor*

Chair: Allen Cook
South Hall, Room 118
(203) 576-4194

On the undergraduate level the Education Minor offers students who are interested in children, schools and education an initial grounding for a career in Education or in an allied field.

Completion of the education minor will not satisfy the State of Connecticut requirements for teacher certification. In order to be recommended for certification to teach in Connecticut, the University of Bridgeport requires students to complete master's level work.

Summary of Requirements

PROGRAM REQUIREMENTS

(Choose 18 semester hours)

Psych 201	Human Growth & Dev. I	3
Psych 202	Human Growth & Dev. II	3
Educ 304	History & Philosophy of Educ.	3
Psyc 314	Educational Psychology	3
Educ 337	Teaching Spec. Needs Students	3
Educ 343	Elementary Methods I	3
Educ 344	Elementary Methods II	3

Elective Studies *Bachelor of Elective Studies Degree*

Chair: George Blake
Stratford Hall
(203) 576-4958

The Bachelor of Elective Studies degree is for the student who wishes great flexibility in pursuing college work as well as for the student with well defined goals. The candidate for the B.E.S. Program will "custom-make" his or her course of study, which may include interdisciplinary work that does not fit well into conventional degree programs. Planning and revision of the programs will be done with a faculty advisor. Many graduates holding this degree have been accepted for advanced work by other institutions. However, since graduate school admissions policies vary greatly depending upon the program and institution, students contemplating graduate study should inform themselves of such requirements.

The Bachelor of Elective Studies program is available to both full-time and part-time students. Students are not formally admitted to the program until they have earned more than 44 credit hours.

Degree Requirements

1. A minimum of 120 hours with minimum cumulative quality point ratio of 2.00.
2. The student must have an area of concentration with a minimum of 30 semester hours (no maximum), in one of the following areas; Humanities, Social Sciences, Natural Science/Mathematics, Business Studies, and Science, Engineering or a Computer related field. Students may also elect a second area of concentration. A grade of "C" or above is required in all courses used to fulfill this requirement. No more than four 100 level courses can be counted in an area of concentration.
3. At least half of the semester hours to be counted in the area of concentration must be completed at the University of Bridgeport.
4. Students may not take core courses or courses counting in an area of concentration or a minor on a pass/fail basis. The University policy on pass/fail courses limits this option to a maximum of six courses (two courses per semester) during a student's academic career, for free electives only.
5. Elective Studies majors may include one or more minors in their programs. Courses used to fulfill requirements for a minor may not be counted in an area of concentration.

Summary of Requirements

PROGRAM REQUIREMENT

Approved Area of Concentration for the B.E.S. within Divisions. A minimum of 30 semester hours is required in one of the following categories (see item 2 under B.E.S. degree requirements):

HUMANITIES

All Art History
All Art of the Cinema and History of the Cinema
All Literature and Linguisitics*
All Culture/Civilization
Music Appreciation (Music 121) and all History of Music
All Philosophy
All Theatre History (includes Theatre 103)
All History

*Writing and composition courses in English and conversation, composition, and introductory (elementary, intermediate) courses in languages MAY NOT be used to meet requirements in this category.

SOCIAL SCIENCES

All Economics
All Political Science
All History
All Sociology
All Psychology

NATURAL SCIENCES/MATHEMATICS

Biology
Chemistry
Geology (exception:Geology 100)
Physics (including Astronomy)
Science
Mathematics (exceptions: Math 200)

BUSINESS STUDIES

All Accounting
All Economics
All Finance
All Business Law
All International Business
All Managment Information Systems
All Management Science
All Management
All Marketing

SCIENCE, ENGINEERING, OR COMPUTER RELATED FIELDS

All Computer Engineering
All Computer Sciences
All Chemistry
All Electrical Engineering
All Management Engineering
All Mechanical Engineering
All Mathematics (except Math 200)
All Physics

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition & Rhetoric	3
Math C105 *or*	Demonstrated Competency	3
Hum C201/202	Humanities I and II	6
SoSc C201/202	Social Sciences I and II	6
Sci C101/102	Natural Science I and II	6
FA C101	Fine Arts	3
IntSt C101	Integrated Studies	3
Caps C390	Capstone Seminar	3
	Liberal Arts Requirements *	9
		42

Total Semester Hours 120

Fashion Merchandising *Associate in Arts Degree*

Chair: Patricia Rigia
END Hall, Room 1B
(203) 576-4098

Fashion Merchandising offers a two-year Associate's degree program in Fashion Merchandising and Retailing for those interested in pursuing careers within the diversified fashion field. The programs of study are arranged so that the student, after earning an Associate in Arts degree, may go on to complete the Bachelor of Science degree requirements with the full utilization of all earned semester hours. Refer to the Fashion Merchandising and Retailing four-year program in this Catalog.

In addition to formal class work, the student is required to participate in a supervised industry internship program with approved retail organizations that include many prestigious New York City stores. Other important aspects of the program are: fashion show productions; resident buying office workshops; field trips to the New York market, trade shows, museums, manufacturers, and textile plants at a nominal cost to student. On-campus seminars are led by outstanding industry personnel.

All students except co-op, must fulfill a supervised industry internship between Thanksgiving and Christmas of their sophomore fall semester. The retail organization within which they will work is selected by the faculty of the Fashion Merchandising and Retailing Program. A student must have earned a 2.5 QPR to obtain junior status in the Program.

The degree will not be granted to students who receive less than "C" in Retailing 280. The degree will not be granted to students receiving more than one "D" in any Fashion Merchandising and Retailing course.

Cooperative Education Program

Fashion Merchandising also offers a program combined with a full-time cooperative education program open to those interested in pursuing careers within the diversified retailing and fashion fields. Co-op students graduate in approximately two and one-half years with one year of professional experience. For further information refer to the Fashion Merchandising and Retailing Cooperative Education brochure.

Summary of Requirements

PROGRAM REQUIREMENTS

FM 101	Fashion Fundamentals	3
FM 107	Furniture and Home Furnishings	3
FM 108	Product Knowledge – Fashion Accessories	3
FM 270	Fashion Show	1
Retl 102	Merchandising Math	3
Retl 180	Seminar in Professional Development	2
Retl 201	Retail Adver. & Fashion Promotion	3
Retl 203, 204	Fashion & Retail Buying I & II	6
Retl 205, 206	Textiles I & II	6
Retl 207	Strategy of Selling	3
Retl 213	Retail Hum. Resource Management I	3
Retl 280	Industry Internship	3
A & D 103	Visual Organization	3
		42

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition & Rhetoric	3
Hum C201	Humanities I	3
SoSc C201	Social Science I	3
CS 100	Retail Comp	3
MCom 110	Public Speaking	3
or 205	Interpersonal Communication	
	General Education Elective	3
		18

Total Semester Hours **60**

Suggested Program

FIRST SEMESTER

Engl C101	Composition & Rhetoric	3
A & D 103	Visual Organization I	3
FM 101	Fashion Fundamentals	3
FM 107	Furniture and Home Furnishings	3
Hum C201	Humanities I	3

SECOND SEMESTER

SoSc C201	Social Science I	3
FM 108	Product Knowledge – Fashion Accessories	3
Retl 102	Merchandising Mathematics	3
Retl 180	Seminar in Professional Development	2
Retl 205	Textiles I	3
CS 100	Computer Science	3

THIRD SEMESTER

Retl 203	Fashion and Retailing Buying I	3
Retl 206	Textiles II	3
Retl 207	Retail Salesmanship	3
Retl 213	Retail Human Resource Management I	3
Retl 280	Industry Internship	3

FOURTH SEMESTER

FM 270	Fashion Show	1
Retl 201	Retail Advertising and Fashion Promotion	3
Retl 204	Fashion and Retailing Buying II	3
	General Education Elective	3
MCom 205	Interpersonal Communication or	3
or MCom 110	Public Speaking	
Math C105	Intermediate Algebra	3

Total Semester Hours **60**

Fashion Merchandising *Bachelor of Science Degree*

Chair: Patricia Rigia
END Hall, Room 1B
(203) 576-4098

The Bachelor of Science degree is required by an increasing number of organizations for admission into their executive training programs. This curriculum is designed so that the student may declare a minor (usually 18 semester hours) in suggested related studies such as textile design, advertising, art, international business, marketing, business administration, management, and fashion design. The student is prepared for positions in the creative and executive levels of fashion in the following areas: Fashion Design, Fashion Marketing (domestic, international), Personnel Management, Retail Advertising and Promotion, Buying, Retail Management, Visual Merchandising and Store Display, Textiles, Textile Design and Fashion Production.

All students except co-op, must fulfill a supervised industry internship between Thanksgiving and Christmas of their sophomore fall semester. The retail organization in which they will work is selected by the faculty of the Fashion Merchandising and Retailing Program. A student must have earned a 2.5 QPR to obtain junior status in the Program.

The degree will not be granted to students who receive less than "C" in Retailing 280. The degree will not be granted to students receiving more than one "D" in any Fashion Merchandising and Retailing course.

In addition to formal class work, the student is required to participate in a supervised industry internship program with approved retail organizations that include many prestigious New York City stores. Other important aspects of the program are: fashion show productions; resident buying office workshops; field trips to the New York market, trade shows, museums, manufacturers, and textile plants at a nominal cost to student. On-campus seminars are led by outstanding industry personnel.

Cooperative Education Program

Fashion Merchandising also offers a program combined with a full-time cooperative education program open to those interested in pursuing a career within the diversified retailing and fashion fields. For further information refer to the Fashion Merchandising and Retailing Cooperative Education brochure.

Study Abroad Semester

The Fashion Merchandising and Retailing Department is affiliated with several Study Abroad Programs. Students may attend the London College of Fashion, the University of Florence, Italy and several universities in Australia. This off-campus semester enables B.S. degree students to participate in a couture study week in Paris plus retail experiences in other countries.

Students who wish to participate in this affiliated Study Abroad Program are advised to make application in their sophomore year for the Fall or Spring semester of their junior or senior year. Electives for the B.S. degree are satisfied by all study abroad program semester hours with approval of the Department.

Students with prior co-op experience who participate in the Spring semester abroad may opt for a Summer co-op experience in Europe.

Minor Option

Students enrolled in other majors at the University of Bridgeport may declare a minor status if they complete a minimum of 18 semester hours in the following areas: 3 to 9 semester hours may be elected from the following: Fashion Merchandising or Retailing 101, 107, 108, 201; 6 to 9 semester hours from the following: Retailing 102, 207, 213; 3 semester hours from the following: Retailing 300, 308, or 313.

Transfer Students

The Fashion Merchandising and Retailing B.S. degree program easily accommodates transfer students from other two-year programs. Transfer students must have earned at least a 2.5 grade point average to transfer into this program. No courses with a "D" grade are transferable. Applicants with below the 2.5 grade point average may be reviewed through a personal interview for either "Probation" or "New Start" consideration. Transfer Articulation Agreements are in effect with Dean College (MA), Bay Path College (MA), Nassau Community College (NY), Dutchess (NY) and Westchester Community College, Middlesex Community College (CT), Fisher Junior College (MA), Holyoke Community College (MA), Orange County Community College (NY) and County College of Morris (NJ).

SPECIALTY IN TEXTILES

A & D 103	Visual Organization	3
A & D 247	Woven Design I	3
Retl 205	Textiles I	3
Retl 206	Textiles II	3
Retl 307	Surface Design I	3
Retl 308	Advanced Textiles	3
		18

SPECIALITY IN FASHION DESIGN

A & D 105	Drawing	3
A & D 325	Illustration	3
FM 104	History of Costume	3
Retl 205	Textiles I	3
Retl 206	Textiles II	3
Retl 307	Surface Design I	3
		18

SPECIALTY IN MARKETING

Mktg 305	Principles of Marketing	3
Law 251	Business Law I	3
(4) 300-level Marketing courses		12
		18

Fashion Merchandising *Bachelor of Science Degree*

Summary of Requirements

PROGRAM REQUIREMENTS

FM 101	Fashion Fundamentals	3
FM 104	History of Costume	3
FM 107	Furniture and Home Furnishings	3
FM 108	Product Knowledge-Fashion Accessories	3
FM 270	Fashion Show	1
Retl 102	Merchandising Mathematics	3
Retl 180	Seminar in Professional Development	2
Retl 201	Retail Advert. & Fashion Promotion	3
Retl 203-204	Fashion & Retail Buying I & II	6
Retl 205-206	Textiles I & II	6
Retl 207	Strategies of Selling	3
Retl 213	Retail Human Resource Management I	3
Retl 280	Industry Internship	3
Retl 300	Mass Merchandising/Marketing	3
Retl 308	Advanced Textiles	3
Retl 313	Retail Management II	3
Retl 330	Intern. Fashions and Furnishings	3
		54

REQUIRED COGNATE COURSES

Acct 101	Accounting I	3
A & D 103	Visual Organization I	3
A & D 104	Visual Organization II,	
or 105 *or* 247	Drawing, Weaving	3
Mktg 305	Principles of Marketing	3
	Free or Minor Electives	12
		24

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition & Rhetoric	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
Hum C202	Humanities II	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
Sci C101	Natural Science I	3
Sci C102	Natural Science II	3
FA C102	Fine Arts	3
IntSt C101	Integrated Studies	3
Caps C390	Capstone Seminar	3
MCom 205	Inter. Comm.	3
or MCom 110	Public Speaking	
Liberal Arts Electives		9
		45

Total Semester Hours 126

Suggested Program

FIRST SEMESTER

Engl C101	Composition & Rhetoric	3
Hum C201	Humanities I	3
A & D 103	Visual Organization I	3
FM 101	Fashion Fundamentals	3
FM 107	Furniture and Home Furnishings	3

SECOND SEMESTER

FM 108	Product Knowledge-Fashion Accessories	3
Retl 102	Merchandising Mathematics	3
Retl 180	Seminar in Professional Development	2
Retl 205	Textiles I	3
SoSc C201	Social Science I	3
A & D 104 *or*	Visual Organization II,	
105 *or* 247	Drawing, Weaving	3

THIRD SEMESTER

Retl 203	Fashion and Retail Buying I	3
Retl 206	Textiles II	3
Retl 207	Strategies of Selling	3
Retl 213	Retail Human Resource Management I	3
Retl 280	Industry Internship	3

FOURTH SEMESTER

Hum C202	Humanities II	3
FM 270	Fashion Show	1
Retl 201	Retail Advertising and Fashion Promotion	3
Retl 204	Fashion and Retail Buying II	3
MCom 205	Inter Comm	3
or MCom110	Public Speaking	
CS 100	Retl Comp	3

FIFTH SEMESTER

FA C101	Fine Arts	3
SoSc C202	Social Science II	3
Retl 300	Mass Merchandising/Marketing	3
Mktg 305	Principles of Marketing	3
	Elective	3

SIXTH SEMESTER

Sci C101	Natural Science I	3
IntSt C101	Integrated Studies	3
Retl 313	Retail Management II	3
Math C105	Intermediate Algebra	3
	Elective	3

SEVENTH SEMESTER

Sci C202	Natural Science II	3
Acct 101	Financial Accounting	3
Retl 330	International Fashion/Marketing	3
	Elective	6

EIGHTH SEMESTER

Caps C390	Capstone Seminar	3
Retl 308	Advanced Textiles	3
FM 104	History of Costume	3
	Electives	6

Total Semester Hours 123

Finance *Bachelor of Science Degree*

Advisor: William Greenspan
Mandeville Hall, Room 309
(203) 576-4378

The Finance major includes the subject areas of corporate financial management, banking, and investments. The program provides an integrated view of the theoretical and practical aspects of Finance for those who are preparing for careers in financial management, financial institutions, financial markets, law, government service, and related fields. Essential skills in problem-solving are developed with emphasis on wealth maximization. Financial problems are viewed from both their micro-financial and macro-financial aspects.

The University Core Curriculum requires passing the mathematics competency exam or taking Mathematics 105. This competency is a prerequisite for Management Science 110 and 115. The Business Core requires passing a computer competency exam or taking Management Information Systems 191. Students anticipating graduate study in Business are advised to take calculus (Mathematics 106 or Management Science 140) as a free elective.

Upper Division coursework provides students with a common body of managerial knowledge, multinational business studies, study in a major field, and an internship or business development project. The concentration of professional courses in the last two years builds upon the broad-based analytical tools and liberal arts foundation of the first two years.

A student is admitted to the School of Business, through an evaluation of the high school transcript, class rank, and SAT scores, based on the determination that the student has demonstrated potential in analytical reasoning, comprehension and expression in words and creative power in thinking. Students transferring from undergraduate majors of other colleges should have a minimum quality point ratio of 2.5.

Management 350, Business Policy and Strategy, is the Capstone Course of this degree program. The final examination of this course shall constitute, therefore, an outcome assessment of what the student has learned in the program. This examination, normally an extensive and comprehensive case study, will be graded by several faculty members representing different and relevant disciplines.

Summary of Requirements

PROGRAM REQUIREMENTS

Acct 101	Financial Accounting	3
MS 110	Intro to Management Science	3
MIS 191	Computer Concepts	3
Law 251	Business Law I	3
MS 115	Probability for Business	3
MS 120	Statistical Decision-Making for Business	3
Acct 331	Managerial Accounting	3
Fin 309	Managerial Finance	3
Mgt 301	Operations Management	3
MIS 300	Management Information Systems	3
Mktg 305	Principles of Marketing	3
Acct 327	Multinational Accounting	3
Econ 375	Multinational Economics	3
Fin 380	Multinational Finance	3
Mgmt 302	Multiculture Management	3
Mktg 342	Multinational Marketing	3
Mgmt 350	Business Policy and Strategy	3
BuAd 382	Senior Project/Internship	3
		54

Plus any twelve semester hours of Finance/ Economics electives selected from:

Fin 321	Investment Principles	3
Fin 345	Bank Management	3
Fin 365	Financial Theory	3
Fin 399	Independent Study	3
Econ 301	Money, Banking and Capital Markets	3
Econ 310	Income Theory	3
Econ 311	Price Theory	3
Econ 398	Monetary and Fiscal Policy	3
		12

FREE ELECTIVES **12**

GENERAL EDUCATION REQUIREMENTS

Engl 100/101	Composition & Rhetoric I	3
IntSt C101	Integrated Studies/ Oral Communication	3
Math C105	Intermediate Algebra	3
Sci C101, 102	Natural Science I & II	6
Hum C201, 202	Humanities I & II	6
Econ 201	Principles of Economics - Macro	3
Econ 202	Principles of Economics - Micro	3
Eng 202	Advanced Composition (for Business)	3
FA C101	Fine Arts	3
Caps 390	Capstone Seminar	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
		42

Total Semester Hours **120**

Suggested Program

FIRST SEMESTER

Acct 101	Financial Accounting	3
Engl C101	Composition & Rhetoric I	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
	Free Elective	3

SECOND SEMESTER

MIS 191	Computer Concepts I	3
Engl 202	Advanced Composition (for Business)	3
MS 110	Intro to Management Science	3
	Free Elective	3
Hum C202	Humanities II	3

THIRD SEMESTER

Econ 201	Principles of Economics - Macro	3
MS 115	Probability for Business	3
SoSc C201	Social Science I	3
	Free Elective	3
FA C101	Fine Arts	3

FOURTH SEMESTER

Econ 202	Principles of Economics - Micro	3
MS 120	Statistical Decision-Making for Business	3
Law 251	Business Law I	3
IntSt C101	Integrated Studies/ Oral Communication	3
SoSc C202	Social Science II	3

FIFTH SEMESTER

Acct 331	Managerial Accounting	3
Fin 309	Managerial Finance	3
Mktg 305	Principles of Marketing	3
Mgmt 301	Operations Management	3
Sci C101	Natural Science I	3

SIXTH SEMESTER

Acct 327	Multinational Accounting	3
Fin 380	Multinational Finance	3
Mktg 342	Multinational Marketing	3
Mgmt 302	Multiculture Management	3
Sci C102	Natural Science II	3

SEVENTH SEMESTER

MIS 300	Management Information Systems	3
BuAd 382	Senior Project/Internship	3
	Major Electives	6
	Free Elective	3

EIGHTH SEMESTER

Econ 375	Multinational Economics	3
Mgmt 350	Business Policy and Strategy	3
Caps C390	Capstone Seminar	3
	Major Electives	6

Total Semester Hours **120**

General Studies *Associate in Arts Degree*

Chair: George Blake
Stratford Hall
(203) 576-4958

The student enrolled in the Associate in Arts in General Studies program may plan a completely individual program leading to the Associate in Arts degree. There are no specific requirements for the Associate in Arts degree in General Studies except a total of 60 semester hours, a 2.0 minimum QPR, and the following specific course and elective requirements: English C101, Math C105, Humanities C201, 2 additional University Core courses, and 2 electives from the Humanities, Sciences, or Social Sciences.

Summary of Requirements

PROGRAM REQUIREMENTS

Electives		39

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition & Rhetoric	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
SoSc C201	Social Science I	3
Sci C101	Natural Science I	3
	Liberal Arts Electives	6
		21

Total Semester Hours **60**

General Studies *Associate in Science Degree*

Chair: George Blake
Stratford Hall
(203) 576-4958

The student enrolled in the Associate in Science in General Studies program may plan a completely individual program leading to the Associate in Science degree. There are no specific requirements for the Associate in Sciences degree in General Studies except a total of 60 semester hours, a 2.0 minimum Q.P.R, and the following specific course and elective requirements: English C101, Math C105, Humanities C201, 2 additional University Core courses, and 2 electives from the Humanities, Sciences, or Social Sciences. In addition, a minimum of 24 semester hours in Mathematics and Science is required.

Summary of Requirements

PROGRAM REQUIREMENTS

Math and Science Electives	24
Elective Semester Hours	15
	39

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition & Rhetoric	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
SoSc C201	Social Science I	3
Sci C101	Natural Science I	3
	Liberal Arts Electives	6
		21

Total Semester Hours **60**

Suggested Program

FIRST SEMESTER

Engl C101	English (Core)	3
Math C105	Intermediate Algebra	3
	Math/Science Elective	3
	Elective	3
	Elective	3

SECOND SEMESTER

Hum C201	Humanities I	3
	Math/Science Elective	3
	Math/Science Elective	3
	Math/Science Elective	3
	Elective	3

THIRD SEMESTER

SoSc C201	Social Science I	3
	Math/Science Elective	3
	Math/Science Elective	3
	Elective (Core)	3
	Elective	3

FOURTH SEMESTER

Sci C101	Natural Science I	3
	Math/Science Elective	3
	Math/Science Elective	3
	Elective (Core)	3
	Elective	3

Total Semester Hours **60**

Graphic Design *Bachelor of Fine Arts Degree*

Chair: Sean Nixon
Breul Hall, Room 253
Tel: (203) 576-4177/4239
Fax: (203) 576-4051

Success in today's global marketplace is assured for the person who is both creative and an effective communicator. The four year Graphic Design curriculum consists of an integrated, interdisciplinary sequence that is designed (i) to stimulate creativity by encouraging imagination and conceptualization, (ii) to strengthen communication by instilling ways of thinking, analyzing and responding to problems and situations, and (iii) to provide both the essential technological skills and the general knowledge to enable students to do well in any branch of Design communication.

Design majors starts with foundation courses in two and three dimensional design, color, drawing, photography, and computer applications, and with background courses in arts and design history. Emphasis is placed on the four course Design Studio sequence, which acquaints students with ever more sophisticated technologies, starting with desktop publishing and culminating in interactive/integrative software and animation. Students are also introduced to the theory and practice of mass communication and advertising, and are encouraged to undertake further study in the cultural and social background of modern times.

In course work, the emphasis is on creativity in practical,career-related assignments and on the preparation of a meaningful portfolio. Students are encouraged to analyze each others' ideas and to present their own to maximum effect. Summer internships, cooperative work arrangements and studio space are available to qualified students.

Summary of Requirements

PROGRAM REQUIREMENTS

ART & DESIGN FOUNDATION COURSES

A & D 113	Introduction to Computers	1
A & D 103	2-D Design Principles	3
A & D 104	Color Design Principles	3
A & D 105	Drawing I	3
A & D 106	Drawing II	3
A & D 108	3-D Design Principles	3
A & D 219	Introduction to Computer Applications	3
A & D 231	Photography I	3
A & D 278	History of Modern Design	3
		25

MAJOR REQUIREMENTS

Courses from this list are applied to the major:

A & D 203	Typography	3
A & D 205	Drawing III	3
A & D 206	Drawing IV	3
A & D 207	Illustration I	3
A & D 230	Video I	3
A & D 249	Design Studio I	3
A & D 250	Design Studio II	3
A & D 300	Design Studio III	3
A & D 301	Design Studio IV	3
A & D 330	Thesis/Portfolio I	3
A & D 330A	Thesis/Portfolio II	3
MCom 111	Intro. to Mass Comm	3
MCom 220	Intro to Advertising	3
MCom 284	Business Communication	3
Phil 216	Philosophy of World Religions	3
A & D 378	History of Photography	3
Total Semester Hours Required		**48**
Electives		**12**

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition and Rhetoric	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
Hum C202	Humanities II	3
SoSc C201	Social Science I	3
SoSc C202	Social Science I	3
Sci C101	Natural Science I	3
Sci C102	Natural Science II	3
IntSt C105	Integrated Studies	3
Caps C390	Capstone	3
A & D 117	Survey of Art History I	3
A & D 118	Survey of Art History II	3
	Liberal Arts Electives	4
		40

Total Semester Hours **125**

Suggested Program

FIRST SEMESTER

Engl C101	Composition and Rhetoric	3
InSt C105	Integrated Studies	3
A & D 117	Survey of Art History I	1
A & D 103	2-D Design Principles	3
A & D 105	Drawing I	3
A & D 113	Intro. Computer/Word	3

SECOND SEMESTER

Math C105	Intermediate Algebra	3
A & D 118	Survey of Art History II	3
A & D 219	Intro. Computer Apps	3
A & D 106	Drawing II	3
A & D 104	Color Design Principles	3

THIRD SEMESTER

SoSc C201	Social Science I	3
Hum C201	Humanities	3
A & D 231	Photography I	3
A & D 203	Typography	3
	Elective	3

FOURTH SEMESTER

SoSc C202	Social Science II	3
A & D 378	History of Photography	3
A & D 207	Illustration I	3
A & D108	3-D Design Principles	3
	Liberal Arts Electives	4

FIFTH SEMESTER

Sci C101	Natural Science I	3
MCom 111	Intro to Mass Communications	3
A & D 205	Drawing III	3
A & D 249	Design Studio I	3
A & D 230	Video I	3
	Elective	3

SIXTH SEMESTER

Sci C102	Natural Science II	3
A & D 250	Design Studio II	3
	Liberal Arts Elective	3
	Elective	3
MComm 220	Introduction to Advertising	3

SEVENTH SEMESTER

Caps 390	Capstone Seminar	3
Phil 216	Philosophy of World Religions	3
A & D 330	Thesis I	3
A & D 300	Design Studio III	3
A & D 278	History of Modern Design	3

EIGHTH SEMESTER

MCom 284	Business Communications	3
A & D 301	Design Studio IV	3
A & D 330A	Thesis II	3
	Electives	6

Total Semester Hours **125**

Honors in the Major: *Baccalaureate Degrees*

Director: Hans van der Giessen
Stratford Hall
(203) 576-4398

Honors in the major through the Honors College was established in order to recognize and nurture academic achievement and social and moral leadership, to provide superior students with a curriculum that challenges and rewards their achievements and motivation, and to provide a structured forum for the exchange of ideas between its students.

Admission

Admission to the Honors College is open to all Baccalaureate Degree candidates in the College of Graduate and Undergraduate Studies. It is very competitive and based upon a mix of criteria including, where applicable, SAT and/or ACT test results, class standing, grade point average, recommendations, and a formal essay.

Admission decisions are made by the Governing Committee of the Honors College.

Honors College students are simultaneously enrolled in the Honors College and their major program of study.

Summary of Curricular Requirements

The mandatory curriculum of the Honors College consists of a general education core and an honors thesis/project in the major program of study.

The Honors general education core consists of a maximum of 21 sch to be offered through the academic Divisions and Schools of the College of Graduate and Undergraduate Studies. These consist of special topics honors courses that satisfy the State's general education requirements and substitute for specific University Core requirements. Honors College students will complete that part of the University wide Core Curriculum that was not substituted for by honors core courses.

When an honors core course is offered all Honors College students will be required to enroll unless the student has already met the University wide Core Curriculum requirement that the Honors core course substitutes for. Exceptions to this rule may only be made by petition to the Honors College Governing Committee.

The faculty submit honors core course proposals that can substitute for the University wide Core Courses that their Division/School currently offer. The distribution amongst the Divisions and Schools is as follows:

SCHOOL	CREDITS	SUBSTITUTES FOR
School of Business	3	Integrated Studies
School of Science, Engineering and Technology	6	Science 101/102 Math 105
School of Arts, Humanities, and Social Sciences	3 3 3	Social Science 201/202 Humanities 201/202 Fine Arts 101
School of Education and Human Resources	3	Integrated Studies

Graduation from the Honors College requires students to complete an honors project/thesis in their major program of study. This will ordinarily be undertaken for 6 sch, but credit awarded may be greater with the approval of the Honors College governing committee and the School or Division in which the student is matriculated.

An honors project must be approved prior to beginning the undertaking, and to this end a detailed proposal must be submitted to the major program faculty and the Honors College Governing Committee. The completed project will be evaluated by the major program faculty, the Governing Committee of the Honors College, and an evaluator external to the University of Bridgeport. The latter is mutually agreed upon by the honors project's major advisor and the Director of the Honors College.

Graduation from the Honors College is noted on the student's transcript and degree.

Human Services *Bachelor of Science Degree*

Chair: Joseph E. Nechasek
101 South Hall
(203) 576-4176

The Human Services Program is designed to provide the academic and practical experience necessary to enter the field of human services upon completion of the degree. The combination of academic theoretical coursework and its application through supervised field work experience provides students with the breadth of preparation necessary for employment in a wide range of human service agencies and community organizations. Students have the opportunity to enhance their programs with minors in such fields as Education, Business and Social Sciences. Stimulating courses are taught by experienced faculty who are current practitioners as well as active researchers.

A COMBINED PROGRAM: HUMAN SERVICES AND EDUCATION MINOR

The university offers a combined program for those students wanting to minor in Education. Education courses will apply to a graduate level certification program. Students gain knowledge of community-based services and resources available to help families and youth.

Summary of Requirements

PROGRAM REQUIREMENTS

HS 110	Alcohol and other Drugs In Society	3
HS 201	Prin of Therapeutic Relationships	3
HS 203	Introduction to Human Services	3
HS 305	Group Interaction	3
HS 301	Crisis Management	3
HS 303	Couns Mthds for Spec Populations	3
HS 350	Human Services Seminar	3
HS 333	Social Welfare Policy	3
GERO 101	Introduction to Gerontology	3
MGMT 302	Multicultural Management	3
MGMT 305	Personnel Management	3
EDUC 201	Human Growth & Development	3
HS 227	Practicum	6
HS 312	Internship	3
NUTR 205	Fundamentals of Nutrition	3
HS 304	Peer Counseling	3
		51

PLUS ANY FIFTEEN SEMESTER HOURS OF HUMAN SERVICES OR GERONTOLOGY ELECTIVES SELECTED FROM**

GERO 150	Health Problems of Older Persons	3
GERO 276	Mental Health Work with Elderly	3
GERO 301	Special Topics in Gerontology	1-3
GERO 330	Psychology of Middle & Old Age	3
GERO 331	Process of Living & Dying	3
GERO 351	Social Gerontology	3
GERO 389	Sem in Critical Issues in Gerontology	3
GERO 399	Independent Study in Gerontology	1-3
HS 299	Special Topics in Human Services	1-3
HS 309	Strategies of Effective Parenting	3
HS 315	Subst Abuse and ChemDependency	3
HS 316	The Dysfunctional Family	3
HS 332A	Couns Strat in Career Decision Makng	1-3
HS 399	Independent Study in Hum Services	1-3
		15

***Note at least 3 semester hours must be taken from Gerontology and 3 semester hours from Human Services.*

FREE ELECTIVES ____ **14**

GENERAL EDUCATION REQUIREMENTS

Eng C101	Composition and Rhetoric I	3
Hum C201/202	Humanities I & II	6
FA C101	Fine Arts	3
IntSt C101	Integrated Studies	3
Math 105	Intermediate Algebra	3
Sci C101/102	Natural Science I & II	6
SoSc C201/202	Social Science I & II	6
Caps 390	Capstone Seminar	3
Phil 203	Ethics	3
Comm 110	Communications	3
		39

LIBERAL ARTS ELECTIVES ____ **(1)**

TOTAL GENERAL EDUCATION REQUIREMENTS ____ **(40)**

Total Semester Hours ____ **120**

Suggested Program

FIRST SEMESTER

Engl C101	Composition and Rhetoric	3
HS 110	Alcohol and Other Drugs in Society	3
HS 201	Prin of Therapeutic Relationships	3
FA C101	Fine Arts	3
Math 105	Intermediate Algebra	3

SECOND SEMESTER

HS 203	Introduction to Human Services	3
MCom 110	Communications	3
Gero 101	Introduction to Gerontology	3
Phil 203	Ethics	3
HS 303	Counseling Special Populations	3

THIRD SEMESTER

Sci C101	Natural Science I	3
Educ 201	Human Growth and Development	3
HS 277	Practicum	3
Hum C201	Humanities I	3
HS/Gero	Elective	3

FOURTH SEMESTER

Mgmt 302	Multicultural Management	3
SoSc C201	Social Science I	3
IntSt C101	Integrated Studies	3
HS 333	Social Welfare Policy	3
HS/Gero	Elective	3

FIFTH SEMESTER

Hum C202	Humanities II	3
Sci C102	Natural Science II	3
HS 277	Practicum	3
Nut 205	Fundamentals of Nutrition	3
HS/Gero	Elective	3

SIXTH SEMESTER

SoSc C202	Social Science II	3
HS 305	Group Interaction	3
HS 312	Internship	3
HS 301	Crisis Management	3
HS/Gero	Electives	3

SEVENTH SEMESTER

HS 350	Human Service Seminar	3
Mgmt 305	Personnel Management	3
HS 312	Internship	3
HS 304	Peer Counseling	3
HS/Gero	Electives	3

EIGHTH SEMESTER

Caps 390	Capstone Seminar	3
HS/Gero	Electives	6
	Free Electives	6

Total Semester Hours ____ **120**

Illustration *Bachelor of Fine Arts Degree*

Chair: Sean Nixon
Breul Hall, Room 253
(203) 576-4177/4239
Fax: (203) 576-4051

Success in today's global marketplace is assured for the person who is both creative and an effective communicator. The four year Graphic Design curriculum consists of an integrated, interdisciplinary sequence that is designed (i) to stimulate creativity by encouraging imagination and conceptualization, (ii) to strengthen communication by instilling ways of thinking, analyzing and responding to problems and situations, and (iii) to provide both the essential technological skills and the general knowledge to enable students to do well in any branch of Illustration communication.

Illustration majors starts with foundation courses in two and three-dimensional design, color, drawing, photography, and computer application, and with background courses in arts and design history. Then they take advanced courses in drawing, illustration, design studio, painting, printmaking, photography and graphic art production. Students are also introduced to the theory and practice of mass communication and advertising, and are encouraged to undertake further study in the cultural and social background of modern times.

In course work, the emphasis is on creativity in practical career-related assignments and on the preparation of a meaningful portfolio. Students are encouraged to analyze each others' ideas and to present their own to maximum effect. Summer internships, cooperative work arrangements and studio space are available to qualified students.

Summary of Requirements

PROGRAM REQUIREMENT

ART & DESIGN FOUNDATION COURSES

A & D 113	Introduction to Computers	1
A & D 103	2-D Design Principles	3
A & D 104	Color Design Principles	3
A & D 105	Drawing I	3
A & D 106	Drawing II	3
A & D 108	3-D Design Principles	3
A & D 219	Intro. to Computer Apps	3
A & D 231	Photography I	3
A & D 278	History of Modern Design	3
		25

MAJOR REQUIREMENTS

Courses from this list are applied to the major:

A & D 203	Typography	3
A & D 205	Drawing III	3
A & D 206	Drawing IV	3
A & D 207	Illustration I	3
A & D 208	Illustration II	3
A & D 209	Painting I	3
A & D 230	Video I	3
A & D 249	Design Studio I	3
A & D 250	Design Studio II	3
A & D 330	Thesis/Portfolio I	3
A & D 330A	Thesis/Portfolio II	3
MCom 111	Introduction to Mass Comm	3
MCom 220	Introduction to Advertising	3
MCom 284	Business Communication	3
Phil 216	Philosophy of World Religions	3
A & D 378	History of Photography	3
Total Semester Hours Required		**48**
Electives		**12**

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition and Rhetoric	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
Hum C202	Humanities II	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
Sci C101	Natural Science I	3
Sci C102	Natural Science II	3
IntSt C105	Integrated Studies	3
Caps C390	Capstone Seminar	3
A & D 117	Survey of Art History I	3
A & D 118	Survey of Art History II	3
	Liberal Arts Electives	4
		40
Total Semester Hours		**125**

Suggested Program

FIRST SEMESTER

Engl C101	Composition and Rhetoric	3
InSt C105	Integrated Studios	3
A & D 117	Survey of Art History I	1
A & D 113	Intro. to Computer	3
A & D 105	Drawing I	3
A & D 103	2-D Design Principles	3

SECOND SEMESTER

Math C105	Intermediate Algebra	3
A & D 219	Intro Computer Apps	3
A & D 118	Survey of Art History II	3
A & D 106	Drawing II	3
A & D 104	Color Design Principles	3

THIRD SEMESTER

SoSc C201	Social Science I	3
Hum C201	Humanities	3
A & D 278	History of Modern Design	3
A & D 107	3-D Design Principles	3
A & D 205	Drawing III	3

FOURTH SEMESTER

SoSc C202	Social Science II	3
A & D 231	Photography I	3
A & D 207	Illustration I	3
A & D 203	Typography	3
	Liberal Arts Electives	3

FIFTH SEMESTER

Sci C101	Natural Science I	3
MCom 111	Intro to Mass Comm.	3
A & D 249	Design Studio I	3
A & D 209	Painting I	3
A & D 230	Video I	3

SIXTH SEMESTER

Sci C102	Natural Science II	3
A & D 208	Illustration II	3
A & D 250	Design Studio II	3
A & D 206	Drawing IV	3
	Liberal Arts Electives	4

SEVENTH SEMESTER

Caps C390	Capstone	3
MCom 220	Intro. to Advertising	3
A & D 330	Thesis/Portfolio I	3
A & D 278	Photography	3
	Elective	3

EIGHTH SEMESTER

MCom 284	Business Communications	3
Phil 216	Phil. of World Religions	3
A & D 330A	Thesis/Portfolio II	3
	Electives	6
Total Semester Hours		**125**

Industrial Design *Bachelor of Science Degree*

Program Head: Jim Lesko
Breul Hall, Room 212
Tel: (203) 576-4222/4239
Fax: (203) 576-4051

In our technological world, the creative designer leads the way in the design of products that are user friendly, safe, and energy efficient. The designer's responsibility is to bring together all aspects of product development including aesthetics, ergonomics, material selection, manufactureability, and environmental considerations. The designer is on the side of the user, taking care that the finished product fits peoples' needs and capabilities. Every phase of the cycle of product development concerns the designer, from the initial concept through its development into a product and onto its manufacture.

Students in industrial design start by mastering the basics of two and three dimensional design, use of color, drawing, rendering, and computer aided drafting. Next, they learn how to develop and build models in well equipped product development and computer laboratories. Then they study ergonomics, materials and manufacturing, engineering design, the principles and methods of marketing, and presentation techniques. In addition they take courses in art and design history, and in communication, science, and the liberal arts as part of the university's general education core curriculum.

An important aspect of the program is the opportunity provided the student in using the expertise within the university to develop projects in areas that range from marine biology, computer science to sport rehabilitation. Summer internships are available, as are cooperative work opportunities.

Summary of Requirements

PROGRAM REQUIREMENTS

ART & DESIGN FOUNDATION COURSES

A & D 103	2D Principles/Color Theory	3
A & D 105	Drawing I-Structural Visualization	3
A & D 106	Drawing II	3
A & D 108	3-D Design Principles	3
A & D 110	Delineation & Graphics	3
A & D 205	Drawing III	3
A & D 219	Intro. Computer Applications	3
A & D 231	Studio Photography	3
A & D 377	History of Modern Design	3
A & D 278	Hist. of Modern Arch. & Urbanism	3
ID 107	Product Lab Orientation	0
		30

MAJOR REQUIREMENTS

ID 215	Materials and Manufacturing I	3
ID 216	Materials and Manufacturing II	3
ID 217	Computer CAD	2
ID 218 A, B, C	Computer CADD I, II, III	6
ID 255	Industrial Design Studio I	3
ID 255A	Professional Seminar I	1
ID 256	Industrial Design Studio II	3
ID 256A	Professional Seminar II	1
ID 305	Industrial Design Studio III	3
ID 305A	Professional Seminar III	1
ID 306	Industrial Design Studio IV	3
ID 306A	Professional Seminar IV	1
ID 309	Human Factors	3
ID 355	Industrial Design Studio V	3
ID 355A	Professional Seminar V	1
ID 356A	Industrial Design Thesis	6
ID 356A	Professional Seminar VI	1
ID 399	Special Projects	3
	Electives	10
		57

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition & Rhetoric	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
Hum C202	Humanities II	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
Sci C101	Natural Science I	3
Sci C102	Natural Science II	3
A & D 117	Survey of Art History I	3
A & D 118	Survey of Art History II	3
IntSt C105	Integrated Studies	3
Caps C390	Capstone Seminar	3
	Liberal Arts Electives	4
		40

Total Semester Hours ____ **127**

Suggested Program

FIRST SEMESTER

Engl C101	Composition and Rhetoric	3
Sci C101	Natural Science I	3
A & D 103	2D Principles/Color	3
A & D 105	Drawing I	3
A & D 117	History Survey of Art I	3

SECOND SEMESTER

Math C105	Intermediate Algebra	3
Sci C102	Natural Science II	3
A & D 108	3-D Design Principles	3
A & D 106	Drawing II	3
A & D 118	History Survey of Art II	3
ID 110	Delination & Graphics	3

THIRD SEMESTER

ID 255	Industrial Design Studio I	3
ID 255A	Professional Seminar I	1
ID 231	Studio Photography	3
A & D 377	History of Modern Design	3
ID 107	Product Lab Orientation	0
ID 215	Material & Manufacturing	3
A & D 219	Introduction to Computer Applications	3

FOURTH SEMESTER

ID 205	Drawing III	3
ID 216	Materials & Manufacturing II	3
ID 217	CAD	2
ID 256	Industrial Design Studio I	3
ID 256A	Professional Seminar I	1
SoSc C202	Social Science II	3
A & D 377	History of Modern Design	3

FIFTH SEMESTER

Hum C201	Humanities	3
	Elective	3
ID 305	Industrial Design Studio III	3
ID 305A	Professional Seminar III	1
ID 309	Human Factors	3
A & D 380	Hist. of Modern Arch. & Urbanism	3
ID 218A	CADD I	2

SIXTH SEMESTER

Hum C202	Humanities II	3
ID 306	Industrial Design Studio IV	3
ID 306A	Professional Seminar IV	1
InSt C105	Integrated Studies	3
ID 218B	CADD II	2
ID 399	Special Projects	3

SEVENTH SEMESTER

SoSc C201	Social Science I	3
ID 355	Industrial Design Studio V	3
ID 355A	Professional Seminar V	1
Caps C390	Capstone Seminar	3
ID 218C	CADD III	2
	Elective	3

EIGHTH SEMESTER

ID 356	Industrial Design Thesis	6
ID 356A	Professional Seminar VI	1
	Electives	6

Total Semester Hours ____ **127**

Interior Design *Bachelor of Science Degree*

Program Head: Donald J. McIntyre
Breul Hall, Room 208
Tel: (203) 576-4221/4239
Fax: (203) 576-4051

Recognizing the relationship between aesthetic concerns, physical needs and the sociological dynamics of living and working spaces, the university's Interior Design program trains students in the professional, technical and aesthetic aspects of the interior environment.

WHAT'S IT LIKE TO BE AN INTERIOR DESIGNER?

The creative Interior Designer is a professional who is qualified to identify, research and solve problems pertaining to the function and quality of the interior environment. The designer must have a knowledge of construction materials and their applications and methods of installation. Interior designers must design the space in accordance with federal, state and local building codes. Interior designers both plan the space and furnish the interiors of private homes, public buildings and commercial establishments such as offices, restaurants, hospitals, hotels and theaters. They may plan additions, renovations and historic preservations. With a client's tastes, needs and budget in mind, they develop designs and prepare working drawings and specifications for interior construction, furnishing and finishes. Designers use computers to generate layout plans that can be easily changed to include input received from the client. They also design lighting and architectural details such as the coordination of colors and the selection of furniture, floor covering and window treatments. Increasingly, they plan spaces that meet accessibility standards for the disabled and the elderly.

As an Interior Design major, you can specialize in several areas:

- Residential Design (new and existing)
- Contract (commercial Design)
- Historic Preservation of Structures
- Urban and Suburban Planning
- Exhibit and Exhibition Design
- Furniture and Furnishings Design

Summary of Requirements

PROGRAM REQUIREMENTS

ART & DESIGN FOUNDATION COURSES

A & D 103	2D Principles/Color Theory	3
A & D 105	Drawing I-Structural Visualization	3
A & D 106	Drawing II	3
A & D 108	3-D Design Principles	3
A & D 110	Delineation & Graphics	3
A & D 205	Drawing III	3
A & D 219	Introduction to Computer	3
A & D 231	Studio Photography	3
A & D 377	History of Modern Design	3
A & D 380	History of Mod. Arch. & Urbanism	3
Int. Des. 107	Product Lab Orientation	0
		30

MAJOR REQUIREMENTS

A & D 206	Drawing IV	3
Int. Des. 217	CAD	3
A & D 330	Senior Portfolio Seminar	3
Int. Des. 265	Interior Design I	3
Int. Des. 266	Interior Design II	3
Int. Des. 355	Interior Design III	3
Int. Des. 356	Interior Design IV	3
Int. Des. 365	Interior Design V (Thesis)	3
Int. Des. 366	Interior Design VI	3
Int. Des. 215	Architectual & Energy Systems	3
Int. Des. 303	Interior Products & Specs	3
Int. Des. 304	Business Practices & Ethics	3
Int. Des. 307	Lighting/Acoustics Design	3
Int. Des. 309	Human Factors Design	3
Int. Des. 311	Display & Exhibition Design	3
Int. Des. 312	Furniture Design	3
Int. Des. 362	Construction Documents (Thesis)	3
Int Des. 218	CADD (A, B, C)	6
		57

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition and Rhetoric	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
Hum C202	Humanities II	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
Sci C101	Natural Science I	3
Sci C102	Natural Science II	3
A & D 117	Survey of Art History I	3
A & D 118	Survey of Art Hiistory II	3
IntSt C105	Integrated Studies	3
Caps C390	Capstone Seminar	3
	Liberal Arts Electives	4
		40

Total Semester Hours _____ **127**

Suggested Program

FIRST SEMESTER

Engl C101	Composition and Rhetoric	3
Sci C101	Natural Science I	3
A & D 117	Survey of Art History I	3
A & D 103	2D Design Principles/Color Theory	3
A & D 105	Drawing I	3
Int. Des. 107	Lab & Equipment Orientation	0

SECOND SEMESTER

Math C105	Intermediate Algebra	3
Sci C102	Natural Science II	3
A & D 118	Survey of Art History II	3
A & D 106	Drawing II	3
A & D 108	3 D Design Principles	3
A & D 110	Drafting/Ortho/Delination	3

THIRD SEMESTER

SoSc C201	Social Science I	3
A & D 231	Studio Photography	3
A & D 377	History of Modern Design	3
A & D 219	Introduction to Computer Applications	3
A & D 205	Drawing III	3
Int. Des. 265	Interior Design Studio I	3

FOURTH SEMESTER

SoSc C202	Social Science II	3
A & D 380	History of Modern Arch. & Urbanism	3
Int. Des. 217	CAD	3
A & D 206	Drawing IV	3
Int. Des. 266	Interior Design Studio II	3

FIFTH SEMESTER

Hum C201	Introduction to Humanities I	3
Int. Des. 218A	CADD I	2
Int. Des. 309	Human Factors	3
Int. Des. 355	Interior Design Studio III	3
Int. Des. 215	Architecture and Energy Systems	3

SIXTH SEMESTER

Hum C202	Introduction to Humanities II	3
IntSt C105	Integrated Studies	3
Int. Des. 356	Interior Design Studio IV	3
A & D 311	Display & Exhibit Design	3
A & D 330	Portfolio/Professional Seminar	3
Int. Des. 218B	CADD II	2

SEVENTH SEMESTER

Caps C390	Capstone Seminar	3
Int. Des. 303	Interior Products & Specifications	3
Int. Des. 365	Advan. Interior Design Studio Thesis	3
Int. Des. 307	Lighting & Acoustic Design	3
Int. Des. 312	Furniture Design	3
Int. Des. 218C	CADD III	2

EIGHTH SEMESTER

	Electives-Liberal Arts	4
Int. Des 366	Advanced Interior Design Studio IV	3
Int. Des 304	Comm/Pro Practice	3
Int. Des 362	Construction Documents on Thesis	3

Total Semester Hours _____ **127**

International Business *Bachelor of Science Degree*

Advisor: William Greenspan
Mandeville Hall, Room 309
(203) 576-4378

The International Business major prepares students for assuming a managerial position in an American or foreign multinational firm, developing one's own business abroad, and working for international governments and agencies. Since this major attracts many students from abroad, it provides students with an opportunity to develop multicultural sensitivity. This major is recommended for those students who feel comfortable with traveling abroad and living in foreign environments. Students in this major are required to achieve proficiency in at least one foreign language before completion of the degree.

The University Core Curriculum requires passing the mathematics competency exam or taking Mathematics 105. This competency is a prerequisite for Management Science 110 and 115. The Business Core requires passing a computer competency exam or taking Management Information Systems 191. Students anticipating graduate study in Business are advised to take calculus (Mathematics 106 or Management Science 140) as a free elective.

Upper Division coursework provides students with a common body of managerial knowledge, multinational business studies, study in a major field, and an internship or business development project. The concentration of professional courses in the last two years builds upon the broad-based analytical tools and liberal arts foundation of the first two years.

A student is admitted to the School of Business, through an evaluation of the high school transcript, class rank, and SAT scores, based on the determination that the student has demonstrated potential in analytical reasoning, comprehension and expression in words and creative power in thinking. Students transferring from undergraduate majors of other colleges should have a minimum quality point ratio of 2.5.

Management 350, Business Policy and Strategy, is the Capstone Course of this degree program. The final examination of this course shall constitute, therefore, an outcome assessment of what the student has learned in the program. This examination, normally an extensive and comprehensive case study, will be graded by several faculty members representing different and relevant disciplines.

Summary of Requirements

PROGRAM REQUIREMENTS

Acct 101	Financial Accounting	3
MS 110	Intro to Management Science	3
MIS 191	Computer Concepts	3
Law 251	Business Law I	3
MS 115	Probability for Business	3
MS 120	Statistical Decision-Making for Business	3
Acct 331	Managerial Accounting	3
Fin 309	Managerial Finance	3
Mgt 301	Operations Management	3
MIS 300	Management Information Systems	3
Mktg 305	Principles of Marketing	3
Acct 327	Multinational Accounting	3
Econ 375	Multinational Economics	3
Fin 380	Multinational Finance	3
Mgmt 302	Multiculture Management	3
Mktg 342	Multinational Marketing	3
Mgmt 350	Business Policy and Strategy	3
BuAd 382	Senior Project/Internship	3
Total Semester Hours		**54**

Plus any twelve semester hours of International Business electives selected from:

IBu 325	Export and Import	3
IBu 330	Economic Growth and Development	3
IBu 371	Alternative Economic Systems	3
IBu 399	Independent Study	3
Econ 301	Money, Banking and Capital Markets	3
MgMt 320	Entrepreneurship and Small Business Management	3
-OR-	Other approved courses in foreign languages, study abroad, history, or political science	
		12

FREE ELECTIVES **12**

GENERAL EDUCATION REQUIREMENTS

Eng C100/101	Composition and Rhetoric I	3
IntSt C101	Integrated Studies/ Oral Communication	3
Math C105	Intermediate Algebra	3
Sci C102/102	Natural Science I & II	6
Hum C201/202	Humanities I & II	6
Econ 201	Principles of Economics - Macro	3
Econ 202	Principles of Economics - Micro	3
Engl 202	Advanced Composition (for Business)	3
FA C101	Fine Arts	3
Caps C390	Capstone Seminar	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
		42

Total Semester Hours **120**

Suggested Program

FIRST SEMESTER

Acct 101	Financial Accounting	3
Engl C100/101	Composition and Rhetoric I	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
	Free Elective	3

SECOND SEMESTER

MIS 191	Computer Concepts I	3
Engl 202	Advanced Composition (for Business)	3
MS 110	Intro to Management Science	3
	Free Elective	3
Hum C202	Humanities II	3

THIRD SEMESTER

Econ 201	Principles of Economics - Macro	3
MS 115	Probability for Business	3
SoSc C201	Social Science I	3
	Free Elective	3
FA C101	Fine Arts	3

FOURTH SEMESTER

Econ 202	Principles of Economics - Micro	3
MS 120	Statistical Decision-Making for Business	3
Law 251	Business Law I	3
IntSt C101	Integrated Studies/ Oral Communications	3
SoSc C202	Social Science II	3

FIFTH SEMESTER

Acct 331	Managerial Accounting	3
Fin 309	Managerial Finance	3
Mktg 305	Principles of Marketing	3
Mgmt 301	Operations Management	3
Sci C101	Natural Science I	3

SIXTH SEMESTER

Acct 327	Multinational Accounting	3
Fin 380	Multinational Finance	3
Mktg 342	Multinational Marketing	3
Mgmt 302	Multiculture Management	3
Sci C102	Natural Science II	3

SEVENTH SEMESTER

MIS 300	Management Information Systems	3
BuA d 382	Senior Project/Internship	3
	Major Elective	3
	Major Elective	3
	Free Elective	3

EIGHTH SEMESTER

Econ 375	Multinational Economics	3
Mgmt 350	Business Policy and Strategy	3
Caps C390	Capstone Seminar	3
	Major Elective	3
	Major Elective	3

Total Semester Hours **120**

Legal Assistant (Paralegal) Program *Associate in Arts Degree*

Degree Director: Rudolph Sommer
Dana Hall, Room 130, (203)576-4641
Administrative Coordinator: Louise Dobos

Member of the American Association for Paralegal Education (AAFPE); approved by the American Bar Association.

Law firms today are finding it increasingly difficult to handle their clients' needs in an economically efficient manner. The American Bar Association recognizes the need for legal assistants and sets forth standards for their training. Services performed by legal assistants (paralegals) are under the supervision of lawyers in law offices, corporate headquarters, banks, insurance companies and the public sector.

All courses directly related to law are taught by qualified practicing attorneys. The Legal Assistant Studies degree also may be a stepping stone to a Bachelor's degree and a law degree.

ADMISSION

Both high school and college graduates are eligible for admission. A personal interview is required. The interview as well as the grades of the applicant will govern admission into the program.

MINOR IN LAW

A minor in Law may be obtained by taking the following six courses: LAS 102 Legal Research; LAS 206 Property and Conveyance; Law 251 Business Law I; LAW 252 Business Law II; LAS 208 Estate Probate and Taxation; LAS 309 Domestic Relations.The Director of the Legal Assistant Studies Program may authorize up to six semester hours substitution of comparable coursework.

Suggested Program

This curriculum is for first-year and second-year college students. Transfer students and college graduates may be exempted from the non-law courses.

FIRST YEAR

Engl C101	Composition and Rhetoric	3
LAS 101	Criminal Law	2
LAS 105	Torts	2
LAS 102	Legal Research	3
LAS 103	Contracts and Uniform Commercial Code	3
LAS 104	Legal Writing	3
LAS 305	Computer Technology in the Law Office	3
MCom 110	Public Communications	3
or MCom 205	Interpersonal Communications	3
Hum C201	Humanities I	3
SoSc C201	Social Science I	3
FA C101	Fine Arts	3
	Electives	3

SECOND YEAR

Math C105	Intermediate Algebra	3
LAS 205	Business Organizations and Administrative Law	3
LAS 206	Property and Conveyance	4
LAS 208	Estate, Probate & Taxation	3
LAS 307	Litigation	3
LAS 309	Domestic Relations	3
LAS 310	Internship	3
Sci C101	Natural Science I	3
	Electives	6

Total Semester Hours 65

Summary of Requirements

PROGRAM REQUIREMENTS

LAS 101	Criminal Law	2
LAS 102	Legal Research	3
LAS 103	Contracts & Uniform Comm. Code	3
LAS 104	Legal Writing	3
LAS 105	Torts	2
LAS 205	Bus. Organ. & Admin. Law	3
LAS 206	Property & Conveyancing	4
LAS 208	Estate, Probate & Taxation	3
LAS 305	Computer Technology in Law Office	3
LAS 307	Litigation	3
LAS 309	Domestic Relations	3
LAS 310	Internship	3
		35

GENERAL EDUCATION REQUIREMENTS

FA 101	Aesthetics	3
Engl C101	Composition and Rhetoric	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
SoSc C201	Social Science I	3
Sci C101	Nat. Science I	3
MCom 110	Public Communications	3
or MCom 205	Interpersonal Communications	3
	Electives	9
		30

Total Semester Hours 65

Literature and Civilization *Bachelor of Arts Degree*

Program Head: Edward Geist
Stratford Hall
(203) 576-4956
Secretary: Jo Lipinski
115 Breul Hall: 203 576-4239
Fax 203 576-4051)

The Humanities major, with its emphasis on the connections between the humanities as well as on their individual aspects, on abstract ideas as well as specific skills, on the global as well as the local context, ensures that students have the resources which will enable them to pursue successfully careers and leadership roles in their communities. The major provides students with the skills, knowledge, and insights which accrue from the study of history, literature, and philosophy, in association with other liberal arts' disciplines. The degree requires 42 hours in the Humanities, 33 hours of General Education, 12 hours of Language study, and 33 hours of Electives.

In Group I students are introduced to the disciplines that make up the humanities by taking a combination of required and elective courses in art history, history, literature, and philosophy. In the senior year, Humanities majors take a two-semester sequence (Group II) applying the interrelationships of the humanistic disciplines, first in the Senior Seminar and then in the supervised research and writing of the Senior Thesis in the student's area of Concentration.

The Humanities major allows for five areas of Concentration (Group III): (A) Creative Writing, (B) English, (C) History, (D) Philosophy, and (E) Interdisciplinary Studies. Each Concentration requires 15 hours, a combination of specific courses and electives in the area of study.

The Humanities major must take 12 hours of Language study. The remaining hours may be used to earn a Minor, to take additional courses in the Humanities or the Concentration, or to satisfy a curiosity about some of the many other areas of study offered by the University.

Summary of Requirements

MAJOR PROGRAM REQUIREMENTS

GROUP I: BASIC COURSES *(21 HOURS)*

Engl 305	Shakespeare	3
	English Elective	3
Hist 101	World Civilization I	3
	History Elective	3
Phil 205	Western Philosophy	3
	Philosophy Elective	3
A & D 117	Survey of Art History I *or*	3
Cin Hist 181	Cinema History	
		21

GROUP II: PROGRAM COURSES *(6 HOURS)*

Hum 395A	Senior Seminar	3
Hum 395B	Senior Thesis	3
		6

GROUP III: AREAS OF CONCENTRATION *(15 HOURS)*

CREATIVE WRITING

Engl 201	Introduction to Creative Writing	3
Engl 308	Advanced Creative Writing	3
	Electives in Creative Writing	9
		15

ENGLISH

Engl 207 *or* 208	Survey of American Literature	3
Engl 209 *or* 210	Survey of BritishLiterature	3
	Electives in English	9
		15

HISTORY

Hist 207 or 208	Survey of American History	3
Hist 233	The Roots of ModernCulture	3
	Electives in History	9
		15

PHILOSOPHY

Phil 203	Ethics	3
Phil 216	Philosophy of World Religions	3
	Electives in Philosophy	9
		15

INTERDISCIPLINARY STUDIES

No required courses: Program must have prior approval of the advisor and School Director — 15

GENERAL EDUCATION REQUIREMENTS: CORE (33)

Engl C101	Composition & Rhetoric	3
Math C105	Intermediate Algebra	3
InSt C101	Intergrated Studies	3
FA C101	Fine Arts	3
Sci C101/102	Natural Science I & II	6
Hum C201/202	Humanities I & II	6
SoSc C201/202	Social Sciences I & II	6
Caps C390	Capstone Seminar	3
	Liberal Arts Electives	7
		40

FOREIGN LANGUAGE	12
ELECTIVES AND/OR MINOR	26

Suggested Program

FIRST SEMESTER

Engl C101	Composition & Rhetoric	3
Math C105	Intermediate Algebra	3
IntSt C101	Integrated Studies/Oral Comm	3
Sci C101	Natural Science I	3
	Elective	3

SECOND SEMESTER

FA C101	Fine Arts	3
Sci C101	Natural Science	3
Hist 101	World History (Group 1)	3
	Concentration Elective 1 (Group III)	3
	Elective	3

THIRD SEMESTER

Language 101		3
Hum C201	Humanities I	3
SoSc C201	Social Science I	3
	Concentration Require 1 (Group III)	3
	Elective	3

FOURTH SEMESTER

Language 102		3
Hum C202	Introduction to Humanities II	3
SoSc C202	Social Science II	3
Phil 205	Western Philosophy (Group I)	3
	Elective	3

FIFTH SEMESTER

Language 103		3
A & D 117	Survey of Art History I *or*	
Cin. Hist 181	Introd. to Film Apprec. (Group I)	3
	Philosophy Elective (Group I)	3
	Concentration Elective 2 (Group III)	3
	Elective	3

SIXTH SEMESTER

Language 104		3
	Concentration Require. 2 (Group III)	3
Engl 305	Shakespeare (Group I)	3
	Electives	6

SEVENTH SEMESTER

Hum 395A	Senior Seminar (Group II)	3
Caps C390	Capstone Seminar	3
	History Elective (Group I)	3
	Electives	6

EIGHTH SEMESTER

Hum 395B	Senior Thesis (Group II)	3
	Concentration Elective 3 (Group III)	3
	English Elective (Group I)	3
	Elective s	6

Total Semester Hours — **120**

Management and Industrial Relations *Bachelor of Science Degree*

Advisor: William Greenspan
Mandeville Hall, Room 309
(203) 576-4378

The Management and Industrial Relations major prepares graduates to enter the workplace as supervisors, operations or human resources technicians and start-up entrepreneurs, permitting them to address the opportunities in the job market appropriately. Research, special projects and independent study permit each student to fit the major to their personal interests, values and aspirations. Specific operations issues as well as broad management policy concerns are covered equally, assuring relevance of studies to entry-level positions and readiness for growth in any organization.

Maximum flexibility in selection to fulfill major requirements is offered. After completion of core courses in interpersonal relations and human resource management, the student may elect courses in small business and entrepreneurship, advanced operations management, human resource skills and programs, labor law and conflict management, to complete the major. Students following an entrepreneurial studies track, for instance, would take the course in small business, advanced operations management, labor law and complete an independent study focused on preparation of a comprehensive business plan for a prospective business start-up.

Students should consult with the designated undergraduate advisor to plan the selection and sequencing of courses to satisfy the major requirements.

The University Core Curriculum requires passing the mathematics competency exam or taking Mathematics 105. This competency is a prerequisite for Management Science 110 and 115. The Business Core requires passing a computer competency exam or taking Management Information Systems 191. Students anticipating graduate study in Business are advised to take calculus (Mathematics 106 or Management Science 140) as a free elective.

Upper Division coursework provides students with a common body of managerial knowledge, multinational business studies, study in a major field, and an internship or business development project. The concentration of professional courses in the last two years builds upon the broad-based analytical tools and liberal arts foundation of the first two years.

A student is admitted to the School of Business, through an evaluation of the high school transcript, class rank, and SAT scores, based on the determination that the student has demonstrated potential in analytical reasoning, comprehension and expression in words and creative power in thinking. Students transferring from undergraduate majors of other colleges must have a minimum quality point ratio of 2.5.

Management 350, Business Policy and Strategy, is the Capstone Course of this degree program. The final examination of this course shall constitute, therefore, an outcome assessment of what the student has learned in the program. This examination, normally an extensive and comprehensive case study, will be graded by several faculty members representing different and relevant disciplines.

Summary of Requirements

PROGRAM REQUIREMENTS

Acct 101	Financial Accounting	3
MS 110	Introduction to Management Science	3
MIS 191	Computer Concepts	3
Law 251	Business Law I	3
MS 115	Probability for Business	3
MS 120	Statistical Decision-Making for Business	3
Acct 331	Managerial Accounting	3
Fin 309	Managerial Finance	3
Mgmt 301	Operations Management	3
MIS 300	Management Information Systems	3
Mktg 305	Principles of Marketing	3
Acct 327	Multinational Accounting	3
Econ 375	Multinational Economics	3
Fin 380	Multinational Finance	3
Mgmt 302	Multiculture Management	3
Mktg 342	Multinational Marketing	3
Mgmt 350	Business Policy and Strategy	3
BuAd 382	Senior Project/Internship	3
		54

Twelve semester hours of Management electives selected from:

Mgmt 300	Interpers. and Group Beh. in Org.	3
Mgmt 305	Human Resource Issues in Management	3
Mgmt 311	Hum. Res. Mgmt Programs and Skills	3
Mgmt 320	Entrepren. and Small Bus. Mgmt	3
Mgmt 335	Advanced Operations Management	3
Mgmt 340	Conflict and Negotiation	3
Mgmt 342	Labor Law and Arbitration	3
Mgmt 399	Independent Study	3

MANAGEMENT ELECTIVES 12

FREE ELECTIVES 12

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition and Rhetoric I	3
IntSt C101	Integrated Studies/Oral Comm	3
Math C105	Intermediate Algebra	3
Sci C101, C102	Natural Science I & II	6
Hum C201, C202	Humanities I & II	6
Econ 201	Principles of Economics - Macro	3
Econ 202	Principles of Economics - Micro	3
Engl 202	Advanced Composition (for Business)	3
FA C101	Fine Arts	3
Caps C390	Capstone Seminar	3
SoSc C201/202	Social Science I & II	3
		42

Total Semester Hours 120

Suggested Program

FIRST SEMESTER

Acct 101	Financial Accounting	3
Engl C101	Composition & Rhetoric I	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
	Free Elective	3

SECOND SEMESTER

MIS 191	Computer Concepts	3
Eng 202	Advanced Composition (for Business)	3
MS 110	Intro to Management Science	3
	Free Elective	3
Hum C202	Humanities II	3

THIRD SEMESTER

Econ 201	Principles of Economics - Macro	3
MS 115	Probability for Business	3
SoSc C201	Social Science I	3
	Free Elective	3
FA C101	Fine Arts	3

FOURTH SEMESTER

Econ 202	Principles of Economics - Micro	3
MS 120	Statistical Decision-Making for Business	3
Law 251	Business Law I	3
IntSt C101	Integrated Studies/ Oral Comm	3
SoSc C202	Social Science II	3

FIFTH SEMESTER

Acct 331	Managerial Accounting	3
Fin 309	Managerial Finance	3
Mktg 305	Principles of Marketing	3
Mgmt 301	Operations Management	3
Sci C101	Natural Science I	3

SIXTH SEMESTER

Acct 327	Multinational Accounting	3
Fin 380	Multinational Finance	3
Mktg 342	Multinational Marketing	3
Mgmt 302	Multiculture Management	3
Sci C102	Natural Science II	3

SEVENTH SEMESTER

MIS 300	Management Information Systems	3
BuAd 382	Senior Project/Internship	3
	Major Electives	6
	Free Elective	3

EIGHTH SEMESTER

Econ 375	Multinational Economics	3
Mgmt 350	Business Policy and Strategy	3
Caps C390	Capstone Seminar	3
	Major Electives	6

Total Semester Hours 120

Marketing *Bachelor of Science Degree*

Advisor: William Greenspan
Mandeville Hall, Room 309
(203) 576-4378

In order to prepare for the varied demands of a career in marketing, the Marketing major courses follow an interdisciplinary approach, stressing fundamentals of behavioral analysis, decision-making, research, and the application of managerial techniques to marketing problems. Graduates of this program find opportunities in general management, product management, advertising, sales, marketing research, public relations, retailing, wholesaling, and marketing service organizations.

The University Core Curriculum requires passing the mathematics competency exam or taking Mathematics 105. This competency is a prerequisite for Management Science 110 and 115. The Business Core requires passing a computer competency exam or taking Management Information Systems 191. Students anticipating graduate study in Business are advised to take calculus (Mathematics 106 or Management Science 140) as a free elective.

Upper Division coursework provides students with a common body of managerial knowledge, multinational business studies, study in a major field, and an internship or business development project. The concentration of professional courses in the last two years builds upon the broad-based analytical tools and liberal arts foundation of the first two years.

A student is admitted to the School of Business, through an evaluation of the high school transcript, class rank, and SAT scores, based on the determination that the student has demonstrated potential in analytical reasoning, comprehension and expression in words and creative power in thinking. Students transferring from undergraduate majors of other colleges must have a minimum quality point ratio of 2.5.

Management 350, Business Policy and Strategy, is the Capstone Course of this degree program. The final examination of this course shall constitute, therefore, an outcome assessment of what the student has learned in the program. This examination, normally an extensive and comprehensive case study, will be graded by several faculty members representing different and relevant disciplines.

Summary of Requirements

PROGRAM REQUIREMENTS

Acct 101	Financial Accounting	3
MS 110	Intro to Management Science	3
MIS 191	Computer Concepts	3
Law 251	Business Law I	3
MS 115	Probability for Business	3
MS 120	Statistical Decision-Making for Business	3
Acct 331	Managerial Accounting	3
Fin 309	Managerial Finance	3
Mgmt 301	Operations Management	3
MIS 300	Management Information Systems	3
Mktg 305	Principles of Marketing	3
Mktg 308	Marketing Research	3
Acct 327	Multinational Accounting	3
Econ 375	Multinational Economics	3
Fin 380	Multinational Finance	3
Mgmt 302	Multiculture Management	3
Mktg 342	Multinational Marketing	3
Mgmt 350	Business Policy and Strategy	3
BuAd 382	Senior Project/Internship	3
		57

Plus nine semester hours of Marketing electives selected from:

Mktg 306	Consumer Behavior	3
Mktg 307	Management of Promotion	3
Mktg 310	Service Marketing	3
Mktg 319	Advertising Management	3
Mktg 325	Sales Management	3
Mktg 339	Retailing Management	3
Mktg 350	Marketing Management	3
Mgmt 320	Entrepreneurship and Small Business Management	3
Mktg 399	Independent Study	3
		9

FREE ELECTIVES 12

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition and Rhetoric I	3
IntSt C101	Integrated Studies/Oral Communication	3
Math C105	Intermediate Algebra	3
Sci C101, C102	Natural Science I & II	6
Hum C201, 202	Humanities I & II	6
Econ 201	Principles of Economics - Macro	3
Econ 202	Principles of Economics - Micro	3
Engl 202	Advanced Composition (for Business)	3
BuAd 102	Urban Management Studies	3
FA C101	Fine Arts	3
Caps C390	Capstone Seminar	3
SoSc C201, 202	Social Science I & II	6
		42

Total Semester Hours 120

Suggested Program

FIRST SEMESTER

Acct 101	Financial Accounting	3
Engl C101	Composition & Rhetoric I	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
	Free Elective	3

SECOND SEMESTER

MIS 191	Computer Concepts	3
Engl 202	Advanced Composition (for Business)	3
MS 110	Introduction to Management Science	3
	Free Elective	3
Hum C202	Humanities II	3

THIRD SEMESTER

Econ 201	Principles of Economics - Macro	3
MS 115	Probability for Business	3
SoSc C201	Social Science I	3
	Free Elective	3
FA C101	Fine Arts	3

FOURTH SEMESTER

Econ 202	Principles of Economics - Micro	3
MS 120	Statistical Decision-Making for Business	3
Law 251	Business Law I	3
IntSt C101	Integrated Studies/ Oral Communication	3
SoSc C202	Social Science II	3

FIFTH SEMESTER

Acct 331	Managerial Accounting	3
Fin 309	Managerial Finance	3
Mktg 305	Principles of Marketing	3
Mgmt 301	Operations Management	3
Sci C101	Natural Science I	3

SIXTH SEMESTER

Acct 327	Multinational Accounting	3
Fin 380	Multinational Finance	3
Mktg 342	Multinational Marketing	3
Mgmt 302	Multiculture Management	3
Sci C102	Natural Science II	3

SEVENTH SEMESTER

MIS 300	Management Information Systems	3
BuAd 382	Senior Project/Internship	3
Mktg 308	Marketing Research	3
	Major Elective	3
	Free Elective	3

EIGHTH SEMESTER

Econ 375	Multinational Economics	3
Mgmt 350	Business Policy and Strategy[3]	3
Caps 390	Capstone Seminar	3
	Major Electives	6

Total Semester Hours 120

Mass Communication *Bachelor of Arts Degree*

Chair: Rod Carveth
Breul Hall, Room 224
Tel: (203) 576-4705/4239Fax: (203) 576-4051

The Bachelor of Arts degree is awarded in Mass Communication, with concentrations in Advertising, Public Relations, Journalism, and Communication Studies. The Mass Communication Program offers students an interdisciplinary foundation in the basic theory and skills necessary to become media practitioners and more informed media consumers. Students have the opportunity to pursue internships and independent projects that allow them to have real world experience in the mass media professions. Graduates of this program have gone on to a variety of careers in the media field, including those in advertising, corporate communication, public relations, journalism, and broadcasting.

Students attaining the degree in Mass Communication must complete 36 hours of coursework in the Mass Communication area. All students must complete the 12-hour core requirements. In addition, students must complete 12 hours in one of the concentrations.

In addition to the 12-hour core and 12-hour concentration students are also required to complete an additional 12-hours of elective coursework in Mass Communication for a total of 36 hours. Students are required to successfully pass courses in Mass Communication with a grade of C or better. Semester hours earned for a grade below C in an elective Mass Communication course (including those no longer offered), not raised to a C or better, will be added beyond the 120 otherwise needed for graduation.

WORKING EXPERIENCE

Students are strongly encouraged to obtain working experience in the Mass Communication field through either the cooperative education program or the internship program. To participate in either co-op or internship, students must meet the following requirements:

a be of junior standing

b. have completed at least 18 hours of coursework in mass communication

c. have at least a 2.5 QPA in mass communication with no grade below a C-minus

d. be a student in good academic standing at the university

Students may apply three (3) semester hours of co-op internship or independent study to the thirty-six (36) hours required in the mass communication major. Additional hours of co-op, internship or independent study credit may be applied to general elective credits required for graduation.

DEPTH STUDY

Students are encouraged to obtain a minor of 18-24 semester hours in another department, or a concentration of 15 semester hours of related courses outside Mass Communication may be chosen in consultation with an advisor.

Summary of Requirements

PROGRAM REQUIREMENTS _____

(36 SEMESTER HOURS)

MASS COMMUNICATION CORE

MCom110	Public Communication	3
MCom 111	Introduction to Mass Communication	3
MCom 211	Communication Theory	3
MCom 395	Senior Seminar in Mass Communication	3
		12

CONCENTRATION

Choice of 12 semester hours in one of the four concentrations listed below

ADVERTISING

MCom 220	Introduction to Advertising	3
MCom 323	Advertising Copywriting	3
MCom 333	Advertising Media	3
MCom 339	Advertising and P.R. Campaigns	3

COMMUNICATION STUDIES

MCom 201	Persuasive Communication	3
MCom 205	Interpersonal Communication	3
MCom 303	Comm. and Group Decision Making	3
MCom 304	Communication Research Design	3

JOURNALISM

MCom 240	News Reporting	3
MCom 241	Photojournalism	3
MCom 341	Magazine and Feature Writing	3
MCom 345	Newspaper Editing and Production	3

PUBLIC RELATIONS

MCom 270	Public Relations	3
MCom 370	Publicity Methods	3
MCom 346	Organizational Communication	3
MCom 375	Corporate Communication	3
		12

MASS COMMUNICATION ELECTIVES 12

FREE ELECTIVES 30

FOREIGN LANGUAGE 12

GENERAL EDUCATION REQUIREMENTS _____

Engl C101	Composition and Rhetoric	3
Math C105	Intermediate Algebra	3
or C108	Ideas of Mathematics	
Hum C201/202	Humanities I & II	6
SoSc C201/202	Social Science I & II	6
FA C101	Fine Arts	3
Sci C101/102	Natural Science I & II	6
IntSt C101	Integrated Studies /Oral Comm.	3
Caps C390	Capstone Seminar	3
	Liberal Arts Electives	9
		42

Total Semester Hours _____ 120

Suggested Program (Advertising)

FIRST SEMESTER _____

Engl C101	Composition and Rhetoric	3
Hum C201	Humanities I	3
MCom 110	Public Communication	3
	Foreign Language 101	3
	Elective	3

SECOND SEMESTER _____

Math C105	Intermediate Algebra	
or Math C108	Ideas of Mathematics	3
Hum C202	Humanities II	3
MCom 111	Intro. to Mass Communication	3
	Foreign Language 102	3
	Elective	3

THIRD SEMESTER _____

SoSc C201	Social Sciences I	3
FA C101	Fine Arts	3
MCom 220	Introduction to Advertising	
or MCom 270	Public Relations	3
	Mass Communication Elective	3
	Foreign Language 103	3

FOURTH SEMESTER _____

SoSc C202	Social Sciences II	3
IntSt C201	Integrated Studies /Oral Comm.	3
MCom 323	Copywriting	
or MCom 370	Publicity Methods	3
	Mass Communication Elective	3
	Foreign Language 104	3

FIFTH SEMESTER _____

Sci C101	Natural Science I	3
MCom 330	Advertising Media Planning	3
	Mass Communication Elective	3
	Elective	3
	Liberal Arts Elective	3

SIXTH SEMESTER _____

Sci C102	Natural Science II	3
MCom 339	Advertising/PR Campaigns	3
	Mass Communication Elective	3
	Liberal Arts Elective	3
	Elective	3

SEVENTH SEMESTER _____

Caps C390	Capstone Seminar	
or MCom 395	Studies in Mass Communication	3
	Mass Communication Elective	3
	Electives	6
	Liberal Arts Elective	3

EIGHTH SEMESTER _____

Caps C390	Capstone Seminar	
or MCom 395	Studies in Mass Communication	3
	Electives	12

Total Semester Hours _____ 120

Mathematics *Bachelor of Arts Degree*

Chair: Natalia Romalis-Reytblatt
Dana Hall, Room 151
(203) 576-4268

Mathematics programs at the University of Bridgeport are designed to prepare the student for graduate work in applied mathematics and allied areas, industrial employment and government employment as well as for careers in actuarial science and the quantitative areas of the biological and social sciences.

Bachelor of Arts requires a total of 36 semester hours in mathematics and at least nine additional semester hours from mathematics or related area courses numbered 300 or above. All degree programs in Mathematics require Computer Science 101 and 102.

Students may take additional mathematics electives; those who intend to go to graduate school are advised to obtain competence in French, German or Russian, and to elect one or more of those 400 level mathematics courses which are open to undergraduates and described in the graduate catalog. A total of 120 semester hours is required for graduation.

For any of these major or minor degrees, the student is expected to work out a meaningful program with his/her advisor.

The following year-by-year course displays are to be regarded as illustrative of a typical program leading to a Bachelor's degree in mathematics with a total of 120 semester hours required for graduation.

Summary of Requirements

PROGRAM REQUIREMENTS

Math 110	Calculus and Analytic Geometry I	4
or Math 111	Acceler. Calculus & Analytic Geo. I	4
Math 112	Calculus and Analytic Geometry II	4
Math 214	Linear Algebra	3
Math 215	Calculus and Analytic Geometry III	4
Math 227	Discrete Structures	3
Math 301	Differential Equations	3
Math 314	Numerical Methods	3
Math 323	Probability and Statistics I	3
	Mathematics Electives*	10
CS101	Introduction to Computing I	3
CS102	Introduction to Computing II	3
		43

GENERAL EDUCATION REQUIREMENTS

	Foreign Language	6
MCom 205	Interpersonal Communications	3
IntSt C101	Integrated Studies	3
Engl C101	Composition & Rhetoric I	3
Phys 107/108	Principles I & II	8
Hum C201/C202	Humanities I & II	6
FA C101	Fine Arts	3
SoSc C201/C202	Social Science I & II	6
	Free Electives	18
	Math Electives	12
	Topic	6
Caps C390	Capstone Seminar	3
		77

Total Semester Hours 120

Suggested Program

FIRST YEAR

Engl C101	Composition & Rhetoric	3
Math 111	Calculus I	4
CS 101	Introduction to Computing I	4
IntSt C101	Integrated Studies/ Oral Communication	3
Hum C201	Humanities I	3
Math 112	Calculus II	4
Physics 107	Principles of Physics I	4
CS 102	Introduction to Computing II	3

SECOND YEAR

Math	Linear Algebra	3
Math	Calculus III	4
Phys 108	Principles of Physics II	4
FA C101	Fine Arts	3
	Foreign Language I	3
Math 301	Diff. Equations	3
Math 323	Probability & Statistics I	3
	Foreign Language II	3
SoSc C201	Social Science I	3
Hum C202	Humanities II	3

THIRD YEAR

Math 314	Numerical Methods	3
	Math Electives	6
	Humanities	3
	Free Electives	9
Math 227	Discrete Math	3
SoSc C202	Social Science II	3
Math 391	Modern Algebra	3

FOURTH YEAR

	Topic	6
	Applied Algebra	3
Math 357	Math Seminar	3
	Elective Math	6
	Elective Free	9
Caps C390	Capstone Seminar	3

Total Semester Hours 120

**Mathematics and cognate courses at the 200 level or higher.*

Mathematics *Bachelor of Science Degree*

Chair: Natalia Romalis-Reytblatt
Dana Hall Room 151
(203) 576-4268

Bachelor of Science in Mathematics at the University of Bridgeport is, primarily, a program in applied mathematics. It provides the student with the fundamentals of the major areas of mathematics, with special emphasis on those branches of mathematics that are important in applications. The program provides the necessary background for students who wish to apply mathematics in the natural sciences, as well as for a career in actuarial science. Employment opportunities for applied mathematicians exist in industries, medical technology, and financial institutions.

Choices for a degree program with a major in mathematics are the Bachelor of Science in Mathematics with emphasis in natural sciences, computer science, or actuarial mathematics.

Bachelor of Science requires a total of 40 semester hours in mathematics. Students may take additional mathematics electives; those who intend to go to graduate school are advised to obtain competence in a foreign language. A total of 120 semester hours is required for graduation.

The Bachelor of Science with emphasis in computer science must include a minimum of 18 hours in computer science not including Math/CS 227. The Bachelor of Science with emphasis in natural sciences must include a minimum of 19 hours of Physics, not including Physics 103, 201, or 202. The Bachelor of Science with emphasis in social sciences must include a minimum of 18 hours in social science.

MATHEMATICS MINOR

Students wishing to obtain a minor in mathematics must take Math 110, Math 112, Math 215 and at least 2 courses at the 200 level or higher.

For any of these major or minor degrees, the student is expected to work out a meaningful program with his/her advisor.

The following year-by-year course displays are to be regarded as illustrative of a typical program leading to a Bachelor's degree in mathematics with a total of 120 semester hours required for graduation.

Summary of Requirements

PROGRAM REQUIREMENTS

Math 110	Calculus & Analytic Geometry I	
or Math 111	Acceler. Calculus & Analytic Geo. I	4
Math 112	Calculus & Analytic Geometry II	4
Math 214	Linear Algebra	3
Math 215	Calculus and Analytic Geometry III	4
Math 227	Discrete Structures	3
Math 301	Differential Equations	3
Math 314	Numerical Methods	3
Math 323	Probability and Statistics I	3
	*Mathematic Electives	12
CS101	Introduction to Computing I	4
CS102	Introduction to Computing II	3
		46

ELECTIVES IN CONCENTRATION ____ **27**

TOPIC (INTERDISCIPLINARY STUDIES IN APPLIED MATH) ____ **6**

79

**Mathematics and cognate courses at the 200 level or higher.*

GENERAL EDUCATION REQUIREMENTS

MCom 205	Interpersonal Communications	3
Engl C101	Composition & Rhetoric	3
Phys 107, 108	Principles of Physics I & II	8
Phys 209	Principles of Physics III	4
Hum C201, C202	Humanities I & II	6
IntSt C101	Integrated Studies/Oral Comm.	3
FA C101	Fine Arts	3
SoSc C201, C202	Social Science I & II	6
Caps C390	Capstone Seminar	3
	Liberal Arts Electives	2
		41

Total Semester Hours ____ **120**

Suggested Program

FIRST YEAR

Engl C101	Composition & Rhetoric I	3
Math 110	Calculus I	4
CS 101	Introduction to Computing I	4
MCom 205	Interpersonal Communications	3
Hum C201	Humanities I	3
Math 112	Calculus II	4
Phys 107	Principles of Physics I	4
Phys 108	Principles of Physics II	4
CS 102	Introduction to Computing II	3

SECOND YEAR

Math 214	Linear Algebra	3
Math 215	Calculus III	4
Phys 209	Principles of Physics III	4
FA C101	Fine Arts	3
	Foreign Language I	3
Math 301	Diff. Equations	3
Math 323	Probability & Statistics I	3
	Foreign Language II	3
SoSc C201	Social Science I	3
Hum C202	Humanities II	3

THIRD YEAR

Math 314	Numerical Methods	3
	Math Elective (in concentration)	3
	Free Electives	6
Math 227	Discrete Math	3
Math 401	Advanced Anal. I	3
Math 402	Advanced Anal. II	3
SoSc C202	Social Science II	3
Math 391	Modern Algebra	3

FOURTH YEAR

	Topic (Interdisciplinary Studies in Applied Math)	6
Math 357	Applied Algebraic Structures	3
Math 393	Seminar	3
	Electives (in concentration)	3
	Free Electives	8
Math 424	Mathematical Statistics II	3
Caps C390	Capstone Seminar	3

Total Semester Hours ____ **120**

Medical Technology *Bachelor of Science Degree*

Coordinator: Blonnie Thompson
The Nutrition Institute
Eleanor Dana Hall, Room 113
(203) 576-4589

The Medical Technology Program consists of three years of study at the University and a fourth year of clinical internship training in an accredited hospital. The University does not guarantee admission to a clinical program. A minimum 2.5 or better science QPR is required for continuance in the junior year of the program. No tuition is charged by the University for the fourth year of study; however, a nominal administrative fee is payable to the University.

Summary of Requirements

PROGRAM REQUIREMENTS

MT 102	Introduction to Medical Technology	1
Bio 113	Anatomy & Physiology I	4
Bio 114	Anatomy & Physiology II	4
Bio 211	General Physiology	4
Bio 307	Genetics	3
Bio 320	Microbiology	4
Bio 441	Immunology	4
Chem 205	Organic Chemistry I	4
Chem 206	Organic Chemistry II	4
Math 203	Elementary Statistics	3
Phys 101	Basic Concepts of Physics I	3
Chem 114	Intro. to Biochemistry	4
	Electives	7
		49

REQUIRED HOSPITAL COURSES

MT 310	Hematology	5
MT 311	Clinical Chemistry	8
MT 312	Clinical Microbiology	8
MT 313	Immunology and Serology	3
MT 314	Immunohematology and Blood Banking	3
MT 315	Clinical Microscopy	1
MT 316	Special Topics in Medical Technology	2
		30

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition and Rhetoric I	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
Hum C202	Humanities II	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
Chem 103	General Chemistry I	4
Chem 104	General Chemistry I I	4
FA C101	Fine Arts	3
IntSt C101	Integrated Studies	3
Caps 390	Capstone Seminar	3
	Computer Elective	3
Psyc 103	Introduction to Psychology	3
		41

Total Semester Hours ____ **120**

Suggested Program

FRESHMAN

Bio 113, 114	Anatomy & Physiology I, II	8
Chem103, 104	General Chemistry I, II	8
Engl C101	Composition and Rhetoric I	3
Hum C201/202	Humanities I & II	6
Math C105	Intermediate Algebra	3
Math 203	Elementary Statistics	3
MT 102	Introduction to Medical Technology	1

SOPHOMORE

Bio 211	General Physiology	4
Bio 307	Genetics	3
Chem 205, 206	Organic Chemistry I, II	8
SoSci C201/202	Social Science I & II	6
Psyc 103	Introduction to Psychology	3
IntSt. C101	Integrated Studies	3
FA C101	Fine Arts	3

JUNIOR

Bio 320	Microbiology	4
Bio 441	Immunology	4
Phys 103	Basic Concepts of Physics I	3
	Computer Elective	3
Chem 114	Introduction to Biochemistry	4
Caps C390	Capstone Seminar	3
	Electives	7

SENIOR

MT 310	Hematology	5
MT 311	Clinical Chemistry	8
MT 312	Clinical Microbiology	8
MT 313	Immunology and Serology	3
MT 314,	Immunohematology and Blood Banking	3
MT 315	Clinical Microscopy	1
MT 316	Special Topics in Medical Technology	2

Total Semester Hours ____ **120**

Music Arts *Bachelor of Music Degree*

Program Head: Geoffrey Kidde
Bernhard Center, Room 310
Tel. (203) 576-4407/4239
Fax (203) 576-4051

The Music Program offers four-year programs leading to the Bachelor of Music degree. Concentrations in the Bachelor of Music degree include Music Education, Performance (Keyboard, Voice, Woodwinds, Brass, Percussion, and Strings), Jazz Studies, and Music Business. Bachelor of Music candidates must complete all Music Foundation courses and the academic core courses before graduating.

Admission

In addition to the University's standards for admission, auditions are required of prospective students. Contact the Music Program for audition guidelines.

Please note: The university's undergraduate Music Education Concentration does not lead directly to certification for public school teaching. However, the university's School of Education offers graduate programs that include a Master's Degree/certification program. Contact the School of Education at (203) 576-4194 for more information.

Performance in Applied Area

During the final examination period of each semester, music majors must take an examination in their major applied area before a music faculty jury. At the end of the fourth semester each music major must pass the sophomore review, which consists of a comprehensive critique of academic and applied work completed up to that point.

Facilities for Performance

The Arnold Bernhard Arts and Humanities Center houses the Music Program, a division of the School of Arts, Humanities and Social Sciences. Facilities include the Mertens Theater, the Littlefield Recital Hall, rehearsal spaces, teaching studios, practice rooms, a dance studio, an electronic piano studio, and a Macintosh MIDI facility. A library of scores and recordings, as well as facilities for recording and videotaping, are also available to music students.

Music Program Handbook

Music students receive a Music Program Handbook each fall, which includes procedures, responsibilities, opportunities, and other important information.

Opportunities for Performance

Student, faculty and visiting artist performances form the basis of the concert calendar for Mertens Theater and the Littlefield Recital Hall.

In addition, the Program sponsors the annual Andre and Clara Mertens Contemporary Composer's Festival, productions of new works, and a Chamber Music Series. These activities provide students with numerous opportunities for performance, composition, and listening.

Summary of Requirements

PROGRAM REQUIREMENTS

(All Concentrations of Bachelor of Music)

MUSIC FOUNDATION COURSES

Musc 109	Theory 1	3
Musc 110	Theory 2	3
Musc 215	Theory 3	3
Musc 216	Theory 4	3
Musc 109a	Aural Theory	1
Musc 110a	Aural Theory	1
Music 215a	Aural Theory	1
Music 216a	Aural Theory	1
Musc 201	Masterpieces of Music 1	2
Musc 202	Masterpieces of Music 2	2
Musc 255	Group Piano	2
Musc 256	Keyboard Harmony	2
Musc 203	History of Western Music 1	3
Musc 204	History of Western Music 2	3
Musc 426	Computers in Music	3
Musc 207	History of Jazz	2
	Total	**35**

MUSIC EDUCATION CONCENTRATION

Musc 100	Applied Major	7
MsE 183	Group Voice*	2
MsE 221	Group Strings	2
MsE 223	Group Woodwinds	2
MsE 225	Group Brass	2
MsE 226	Group Percussion	2
Musc 311	Instrumental Conducting	3
Musc 312	Vocal Conducting	3
MsE 343	Music in the Elementary School	3
MsE 380	Music in the Secondary School	3
MsE 336	Jazz Lit. and Techniques	3
MsE 332	Band/Orch Lit and Techniques	3
MsE 331	Choral Lit. and Techniques	3
Musc 298	Piano Maint. and Repair	3
	Ensembles	10
	Junior and Senior Recitals	0
	Total	**51**

**Voice majors substitute Musc 220 —Vocal Diction, 2 semester hours—for Musc 183.*

PERFORMANCE CONCENTRATION

Musc 100	Applied Major	16
Musc 414	Business of Music	2
	Large Ensembles	14
	Small Ensembles	10
Musc 427	MIDI Performance	3
	Electives	6
	Junior and Senior Recitals	0
	Total	**51**

JAZZ STUDIES CONCENTRATION

Musc 100	Applied Major	15
Musc 100	Applied Jazz Piano	2
Musc 304A	Jazz Arranging I	3
Musc 304B	Jazz Arranging II	3
Musc 208A	Jazz Improvisation & Repertoire I	3
Musc 208B	Jazz Improvisation & Repertoire II	3
Musc 414	Business of Music	2
Musc 427	MIDI Performance	3
	Large Ensembles	10
	Small Ensembles	7
	Junior and Senior Recitals	0
	Total	**51**

MUSIC BUSINESS CONCENTRATION

Musc 100	Applied Major	16
Musc 398	Internship	6
Musc 414	Business of Music	2

(In consultation with an Academic Advisor, students choose nine non-music courses from this list)

MCom 220*	Introduction to Advertising	3
MCom 370	Publicity Methods	3
MCom 384	Organizational Communications	3
Acct 101*	Financial Accounting	3
Acct 331	Managerial Accounting	3
Econ 201	Princ. Economics-Macro	3
Econ 202	Princ. Economic-Micro	3
MS 115	Probability for Business	3
MS 120	Statistical Decision Making	3
Law 251	Business Law I	3
Mktg 305*	Principles of Marketing	3
Mgmt 302	Multicultural Management	3
Mgmt 320*	Entrepreneurship and Small Bus Mgmt	3
MIS 191*	Structural Appl Programming	3
Fin 309	Financial Management	3
	Total	**51**

**Recommended*

Music Arts *Bachelor of Music Degree*

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition & Rhetoric	3
Math C105	Intermediate Algebra	3
Hum C201	Humanities I	3
Hum C202	Humanities II	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
Sci C101	Natural Science I	3
Sci C102	Natural Science II	3
FA C101	Fine Arts	3
IntSt C105	Integrated Studies	3
Caps C390	Capstone	3
	Liberal Arts Electives	7
	Total	40

Music Education Total Semester Hours ____ 126
Music Performance Total Semester Hours ____ 126
Jazz Studies Total Semester Hours ____ 126
Music Business Total Semester Hours ____ 126

Music Business Concentration

Suggested Program

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(2)	Musc 100	(2)
Musc 109	(3)	Musc 110	(3)
Musc 109a	(1)	Musc 110a	(1)
Musc 255	(2)	Musc 256	(2)
Musc 426	(3)	Acct 101	(3)
Core Curriculum	(6)	Core Curriculum	(6)
TOTAL	(17)	TOTAL	(17)

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(2)	Musc 100	(2)
Musc 215	(3)	Musc 216	(3)
Musc 215a	(1)	Musc 216a	(1)
Musc 201	(2)	Musc 202	(2)
MCom 220	(3)	MIS 191	(3)
Core Curriculum	(3)	Musc 414	(2)
		Core Curriculum	(3)
TOTAL	(14)	TOTAL	(16)

JUNIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(2)	Musc 100	(2)
Musc 203	(3)	Musc 204	(3)
Musc 207	(2)	MCom 370	(3)
Mktg 30	(3)	Econ 201	(3)
Core Curriculum	(6)	Core Curriculum	(6)
TOTAL	(16)	TOTAL	(17)

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(2)	Musc 100	(2)
Musc 398	(3)	Musc 398	(3)
Law 251	(3)	Finance 309	(3)
Mgmt 320	(3)	Core Curriculum	(6)
Core Curriculum	(4)		
TOTAL	(14)	TOTAL	(15)

Total Semester Hours ____ 126

Music Education Concentration

Suggested Program

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(1)	Musc 100	(1)
Musc 109	(3)	Musc 110	(3)
Musc 109a	(1)	Musc 110a	(1)
Musc 255	(2)	MsE 183	(2)
Ensembles	(2)	Musc 256	(2)
Core Curriculum	(6)	Ensembles	(2)
		Core Curriculum	(6)
TOTAL	(15)	TOTAL	(17)

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(1)	Musc 100	(1)
Musc 215	(3)	Musc 216	(3)
Musc 215a	(1)	Musc 216a	(1)
MsE 221	(2)	MsE 226	(2)
Musc 201	(2)	Musc 202	(2)
Musc 203	(3)	Musc 204	(3)
Ensembles	(2)	Ensembles	(2)
Core Curriculum	(3)	Core Curriculum	(3)
TOTAL	(17)	TOTAL	(17)

JUNIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(1)	Musc 100	(1)
Musc 311	(3)	Musc 312	(3)
Musc 207	(2)	MsE 343	(3)
MsE 223	(2)	Recital	(0)
Musc 426	(3)	MsE 336	(3)
MsE 332	(3)	Musc 298	(3)
Ensemble	(1)	Ensemble	(1)
Core Curriculum	(3)	Core Curriculum	(3)
TOTAL	(18)	TOTAL	(17)

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(1)	MsE 331	(3)
MsE 380	(3)	MsE 225	(2)
Recital	(0)	Core Curriculum	(6)
Core Curriculum	(10)		
TOTAL	(14)	TOTAL	(11)

Total Semester Hours ____ 126

Jazz Studies Concentration

Suggested Program

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(2)	Musc 100	(2)
Musc 109	(3)	Musc 110	(3)
Musc 109a	(1)	Musc 110a	(1)
Musc 201	(2)	Musc 202	(2)
Musc 255	(2)	Musc 256	(2)
Ensemble	(2)	Ensemble	(2)
Core Curriculum	(6)	Core Curriculum	(6)
TOTAL	(18)	TOTAL	(18)

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(2)	Musc 100	(2)
Musc 215	(3)	Musc 216	(3)
Musc 215a	(1)	Musc 216a	(1)
Musc 203	(3)	Musc 204	(3)
Musc 426	(3)	Musc 427	(3)
Ensembles	(2)	Ensemble	(2)
Core Curriculum	(3)	Core Curriculum	(3)
TOTAL	(17)	TOTAL	(17)

JUNIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(2)	Musc 100	(2)
Musc 208A	(3)	Musc 208B	(3)
Musc 207	(2)	Recital	(0)
Musc 414	(2)	Ensemble	(2)
Ensemble	(2)	Core Curriculum	(6)
Core Curriculum	(6)		
TOTAL	(13)	TOTAL	(17)

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(1)	Musc 100	(2)
Musc 304A	(3)	Musc 304B	(3)
Musc 100-Jazz pn	(2)	Ensemble	(3)
Ensemble	(3)	Core Curriculum	(3)
Core Curriculum	(6)	Recital	(0)
TOTAL	(15)	TOTAL	(11)

Total Semester Hours ____ 126

Music Performance Concentration

Suggested Program

MUSIC PERFORMANCE CONCENTRATION

FRESHMAN YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(2)	Musc 100	(2)
Musc 109	(3)	Musc 110	(3)
Musc 109a	(1)	Musc 110a	(1)
Musc 201	(2)	Musc 202	(2)
Ensembles	(3)	Ensembles	(3)
Core Curriculum	(6)	Core Curriculum	(6)
TOTAL	(17)	TOTAL	(17)

SOPHOMORE YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(2)	Musc 100	(2)
Musc 215	(3)	Musc 216	(3)
Musc 215a	(1)	Musc 216a	(1)
Musc 203	(3)	Musc 204	(3)
Musc 255	(2)	Music 256	(2)
Ensembles	(3)	Ensembles	(3)
Core Curriculum	(3)	Core Curriculum	(3)
TOTAL	(17)	TOTAL	(17)

JUNIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(2)	Musc 100	(2)
Musc 426	(3)	Musc 427	(3)
Musc 207	(2)	Musc 414	(2)
Ensembles	(4)	Ensembles	(3)
Core Curriculum	(6)	Core Curriculum	(6)
TOTAL	(17)	Recital	(0)
		TOTAL	(16)

SENIOR YEAR

FALL SEMESTER		SPRING SEMESTER	
Musc 100	(2)	Musc 100	(2)
Musc Elective	(3)	Music Elective	(3)
Ensemble	(3)	Ensemble	(2)
Core Curriculum	(6)	Core Curriculum	(4)
TOTAL	(14)	Recital	(0)
		TOTAL	(11)

Total Semester Hours _____ **126**

Social Sciences *Bachelor of Arts Degree*

Program Head: Charles Justice
Rennell Hall, Room 251
Tel: (203) 576-4239/4148
Fax: (203) 576-4051

The Social Sciences major is designed to provide students with a liberal arts experience from the perspective of the social sciences. It is innovative both in its interdisciplinary approach to subject matter and the options it offers students to pursue their goals, whether in graduate school or government or the foreign service, in international agencies or business, in the law, teaching or community service. In addition to completing the major (i.e. meeting the requirements indicated in Groups I & II), students may choose to add (i) concentrations in History, International Studies, Political Science, Psychology, Sociology, or Interdisciplinary Studies (in which they design a field of study which reflects their own interests, or (ii) minors in career-related areas such as International Business, Finance, Human Services, and Education. Career opportunities traditionally available to liberal arts students are much enhanced by the flexibility the Social Science major permits. In its interdisciplinary approach, its emphasis on breadth as well as depth of learning, and its focus on practical skills, the Social Science major prepares students for success in their careers, for leadership roles in their communities and the world, and for self-fulfillment.

Summary of Requirements

PROGRAM REQUIREMENTS

GROUP I *(30 SEMESTER HOURS)*

Economics	6
History	6
Political Science	6
Psychology	6
Sociology	6
	30

GROUP II *(12 SEMESTER HOURS)*

SoSc 206	Sophomore Seminar	3
SoSc 300	Seminar in Methods	3
SoSc 395A	Thesis I	3
SoSc 395B	Thesis II	3
		12

Total Semester Hours ____ **42**

OPTIONAL CONCENTRATIONS IN THE SOCIAL SCIENCES:

HISTORY

Hist 207	American History I *or*	3
Hist 208	American History II	
Hist 233	Roots of Modern Culture	3
	History Electives	6
		12

INTERNATIONAL STUDIES

PS 209	UN Studies	3
PS 207	World Politics	3
SoSc 207	World Regional Geography	3
Phil 216	World Religion	3
		12

POLITICAL SCIENCE

PS 204	Government and Politics Abroad	3
PS 207	World Politics	3
SoSc 207	World Regional Geography	3
PS 323	Classics in Political Theory *or*	3
PS 324	Recent Political Theory	
		12

PSYCHOLOGY

Psyc 303	Psychology of Personality	3
Psyc 304	Abnormal Personality	3
Psyc 305	Social Psychology	3
Psyc 201	Human Growth & Development I *or*	3
Psyc 202	Human Growth & Development II	
		12

SOCIOLOGY

Soc 231	Cultural Anthropology	3
Soc 310	Multicultural Relations	3
Soc 315	Criminology	3
Soc 333	Social Inequality	3
		12

INTERDISCIPLINARY STUDIES **12**
By arrangement with academic advisor)

FREE ELECTIVES **12**

FOREIGN LANGUAGE **12**

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition & Rhetoric	3
Math C105	Intermediate Algebra	
or C108	Ideas of Mathematics	3
Hum C201/202	Humanities I & II	6
SoSc C201/202	Social Sciences I & II	6
Sci C101/102	Natural Science I & II	6
FA C101	Fine Arts	3
IntSt C101	Integrated Studies/Oral Communication	3
Caps C390	Capstone Seminar	3
	Liberal Arts Electives	9
		42

Total Semester Hours ____ **120**

Suggested Program

FIRST SEMESTER

Engl C101	Composition & Rhetoric	3
Hum C201	Humanities I	3
	Foreign Language 101	3
Math C105	Intermediate Algebra	3
	History (Group I)	3

SECOND SEMESTER

Hum C202	Humanities II	3
	Foreign Language 102	3
	Psychology (Group I)	3
FA C101	Fine Arts	3
	Political Science (Group I)	3

THIRD SEMESTER

SoSc C201	Social Science I	3
	Foreign Language 103	3
	Sociology (Group I)	3
	Economics (Group I)	3
	Political Science (Group I)	3

FOURTH SEMESTER

SoSc C202	Social Science II	3
	Foreign Language 104	3
	Economics (Group I)	3
	History (Group I)	3
SoSc 206	Sophomore Seminar	3

FIFTH SEMESTER

Sci C101	Natural Science I	3
	Sociology (Group I)	3
	Psychology (Group I)	3
	Concentration 1, or Elective	3
	Liberal Arts Elective	3

SIXTH SEMESTER

Sci C102	Natural Science II	3
SoSc 300	Seminar in Methods	3
	Concentration 2 & 3, or Electives	6
	Liberal Arts Elective	3

SEVENTH SEMESTER

IntSt C101	Integrated Studies/Oral Communication	3
SoSc 395A	Thesis I	3
	Concentration 4, or Elective	3
	Free Elective	3
	Liberal Arts Elective	3

EIGHTH SEMESTER

Caps C390	Capstone Seminar	3
SoSc 395B	Thesis II	3
	Free Electives	9

Total Semester Hours ____ **120**

Graduate Degree Programs

Business Administration *Master of Business Administration Degree*

Director: Llewellyn M. Mullings
Mandeville Hall, Room 105
(203) 576-4363

The M.B.A. degree at the University of Bridgeport is offered for full-time or part-time study. Specific course requirements for the degree will provide students with a strong educational background and selection of an M.B.A. concentration. Students with a recent Bachelor's degree and a good academic average from an accredited business college may be able to complete the M.B.A. with 30 semester hours of advanced study. Students with a Bachelor's degree in a non-business field generally require 48 to 54 semester hours to complete the M.B.A.

M.B.A. Curriculum

The M.B.A. requires 30 to 54 semester semester hours of study depending on the student's academic background and level of academic achievement. The curriculum is designed to recognize substantial diversity in preparation and experience for students entering M.B.A. study, as well as different goals and expectations of students after graduation. Except as noted, all courses are three semester hours.

The Curriculum requirement is as follows:

CORE *(May be waived depending on the student's academic background)*	**24**
M.B.A. ADVANCED COURSES & ELECTIVES	**30**
Total Semester Hours	**54**

Core Requirements

(24 SEMESTER HOURS)

M.B.A. study begins with a basic understanding of the concepts and applications of accounting, quantitative methods, and management information systems. Each of these study areas help to develop skills for analysis, decision and communication.*

GSB 400	Accounting Concepts	3
GSB 410	Economic Analysis	3
GSB 450	Management Science	1
GSB 451	Management Information Systems	2
GSB 452	Statistical Decision Theory	3

The next level of study provides a background of the concepts, processes and institutions for financing and managing the organization, and producing and marketing goods and services. The tools of analysis are used in these courses, to broaden the student's knowledge and ability for management decision.

GSB 420	Financial Management	3
GSB 430	Organizational Behavior	3
GSB 431	Operations Management	3
GSB 440	Marketing Concepts	3
		24

**Waivers: Students with recent prior study of core subjects at an accredited business college may be eligible for waiver and/or exemption from core courses. Waiver of any course based on undergraduate study normally requires at least six semester hours study with minimum "B" grades, or successful completion of a competency examination. Students eligible to waive up to 24 semester hours may proceed directly to advanced courses for which they have the appropriate core prerequisite.*

M.B.A. Advanced Courses and Electives

(30 SEMESTER HOURS)

At least one-third of the M.B.A. study program (18 semester hours) is elective for all students, to add breadth of knowledge in management topics and also to achieve greater depth of knowledge in professional discipline. Students with the appropriate study background to waive core courses or who wish to enhance knowledge in specific areas of concentration, may have additional electives available to them. Some of the courses available are listed in the Course Description section of the Graduate Catalog.

REQUIRED COURSES:

GSB 560	Business and Society	3
GSB 561	Business Policy (Capstone)*	3
		6

**The Capstone course is the final course for the M.B.A. program, and is studied generally when a student completes elective and major courses. This provides an integrating analysis for overall management and includes business strategy, and political and international issues for management decision.*

The final examination of the Capstone course shall constitute an outcome assessment of what the student has learned in the program.

The examination, normally an extensive and comprehensive case study, will be graded by several faculty members representing different and relevant disciplines.

PLUS 18 SEMESTER HOURS SELECTED IN AT LEAST FIVE OF THE FOLLOWING AREAS:

1. ACCOUNTING

GSB 500	Accounting for Managers	3
GSB 502	International Accounting	3

2. ECONOMICS

BA 510	Managerial Economics	3
GSB 511	International Trade/Finance	3

3. FINANCE

GSB 520	Ad. Financial Management & Policy	3
GSB 521	Fin. Management of Fin. Institutions	3
GSB 522	Investment Analysis	3

4. MANAGEMENT

GSB 530	Management Theory	3
GSB 531	Small Bus. and Entrepreneurship	3
GSB 532	Advanced Operations Management	3

5. MARKETING

GSB 540	Buyer Analysis	3
GSB 541	Global Market Management	3

6. DECISION THEORY

GSB 550	Advanced Statistical Decision Theory	3
GSB 551	Business Simulation	3
		18

SELECT ONE COURSE IN EACH OF THE FOLLOWING TWO GROUPS:

1. GLOBAL MANAGEMENT GROUP
Select one:

GSB 570	International Issues	3
GSB 571	Language	3
		3

2. EXPERIENTIAL LEARNING GROUP
Select one:

GSB 580	Leadership & Org. Change	3
GSB 581	Business Games	3
GSB 582	Internship	3
GSB 595	Independent Study in Business	3
		3

30

Business Administration Honors Program

Bachelor of Science and Master of Business Administration Degree

Advisor: William Greenspan
Mandeville Hall, Room 309
(203) 576-4378

Graduates with a B.S. degree in any major from the College of Business can generally complete requirements for a Master of Business Administration degree (M.B.A.) with one year of additional study. All applicants must meet admission requirements for the Graduate School at the time of application.

An alternative, for students with exceptional ability is the Business Administration Honors Program. This curriculum is specifically preparatory for graduate study, and has greater flexibility for selection of courses to meet student needs and interests. Students accepted into the Honors Program as freshmen or transfer students are concurrently given conditional admission to the Graduate School. Students accepted into this program are normally expected to rank in the top ten percent of their high school class and achieve a minimum of 1200 on the SAT, or equivalent academic records.

The Honors Program enables students to receive both a bachelor's and a master's degree in five years. (Candidates may apply to receive the bachelor's degree at the end of the fourth year.)

For the bachelor's degree, students may elect any business major. Students are required to elect a minor in some field of humanities, science, or social science. Faculty advisors work closely with students throughout the Honors Program for assistance with selection of courses and to ensure that student goals are met.

During the first three years, students take the complete University and Business Core requirements in addition to studies in a minor. During the senior year, students complete an undergraduate business major and selected courses in liberal arts. The studies differ from regular undergraduate business studies by including a larger portion of liberal arts studies and by including courses contributing to a strong foundation for graduate studies. Students are expected to maintain at least a "B" average to remain in the Honors Program.

At the end of the junior or the beginning of the senior year, students take the Graduate Management Admission Test (GMAT) to qualify for full acceptance into the M.B.A. program. Upon receipt of an acceptable score, they become classified as M.B.A. students and will already have completed the equivalent of 24 credits towards the 54 required for an M.B.A.

During the final year, students complete courses required for the M.B.A. Although all graduate level course work could be completed in the final year, some students may elect to complete some 500 level electives during the summer between senior and M.B.A. years in order to moderate the heavy course load of graduate courses in the fifth year.

The honor students are required to join the Honor Society in the College of Business; to attend all business seminars sponsored by the College; and to write an Honor Thesis during the senior year.

Summary of Requirements

PROGRAM REQUIREMENTS

Acct 101	Financial Accounting	3
Acct 331	Managerial Accounting	3
MS 110	Introduction to Management Science	3
MS 115	Probability for Business	3
MIS 191	Computer Concepts	3
MS 120	Stat. Decision-Making for Business	3
Law 251	Business Law I	3
Fin 309	Managerial Finance	3
Mgt 302	Operations Management	3
Mgt 301	Multiculture Management	3
MIS 300	Management Information Systems	3
Mktg 305	Principles of Marketing	3
BUAD 395	Honors Thesis	3
Mgt 350	Business Policy	3
		42

Plus eighteen semester hours in the major(s) selected from Accounting, Economics, Finance, International Business, Computer Applications and Information Systems, Management and Entrepreneurial Studies, and Marketing. 18

Plus thirty semester hours in the graduate program. 30

**Specific course requirements are described under each major description or course description section of this catalogue and in the Graduate Catalog.*

GENERAL EDUCATION REQUIREMENTS

Engl C101	Composition and Rhetoric I	3
Math 106	Calculus and Social Science	3
FA C101	Fine Arts	3
Sci C101/102	Natural Science I & II	6
Hum C201/202	Humanities I & II	6
IntSt C101	Integrated Studies/Oral Communications	3
Eco 201	Principles of Economics - Macro	3
Eco 202	Principles of Economics - Micro	3
Engl 202	Advanced Composition (for Business)	3
	Foreign Language Elective	3
	Liberal Arts Electives (minor)	15
Caps C390	Capstone Seminar	3
SoSc C201	Social Science I	3
SoSc C202	Social Science II	3
		60

TOTAL SEMESTER HOURS 150

Business Administration Honors Program

Bachelor of Science & Master of Business Administration Degree

Suggested Schedule for Five-Year Program

FIRST SEMESTER

Engl C101	Composition and Rhetoric	3
Acct 101	Accounting Principles I	3
Math 106	Calculus for Social Science	3
MS 110	Introduction to Managment Science	3
Hum C201	Humanities I	3

SECOND SEMESTER

Acct 331	Managerial Accounting	3
MS 115	Probability for Business	3
MIS 191	Computer Concepts	3
Hum C202	Humanities II	3
Engl 202	Advanced Composition	3

THIRD SEMESTER

Econ 201	Principles of Economics - Macro	3
MS 120	Statistical Decision-Making	3
SoSc C201	Social Science I	3
FA C101	Fine Arts I	3
	Foreign Language Elective	3

FOURTH SEMESTER

Econ 202	Principles of Economics - Micro	3
Law 251	Business Law	3
SoSc C202	Social Sciences II	3
IntSt C101	Integrated Studies/Oral Communications	3
	Liberal Arts Elective (minor)	3

FIFTH SEMESTER

Fin 309	Managerial Finance	3
Mgt 301	Operations Management	3
Mgt 302	Multiculture Management	3
Mktg 305	Principles of Marketing	3
Sci C101	Natural Science I	3

SIXTH SEMESTER

MIS 300	Management Information Systems	3
	Major Electives	9
Sci C102	Natural Science II	3

SEVENTH SEMESTER

Caps C390	Capstone Seminar	3
	Major Electives	9
	Liberal Arts Elective (minor)	3

EIGHTH SEMESTER

BUAD 395	Honors Thesis	3
Mgt 350	Business Policy	3
	Liberal Arts Electives (minor)	9

NINTH AND TENTH SEMESTER GRADUATE YEAR

	General Requirements	24
	Global Management Group	3
	Experiential Learning	3

TOTAL CREDITS **150**

Computer Engineering *Master of Science*

Chair: Stephen Grodzinsky
Dana Hall
(203) 576-4145

The Master's degree in computer engineering is a course of study intended to prepare individuals whose undergraduate background is in computer or electrical engineering for advanced professional work in the field and for further study leading to the doctorate. Emphasis is placed on current state-of-the-art applications including parallel computing, image processing, VLSI design and the like. Admission to the program requires an undergraduate degree in engineering, and includes the following fundamental coursework:

- Programming Languages and Techniques
- Data Structures
- Digital Design
- Digital Design Lab
- Computer Organization
- Microprocessors
- Probability and Statistics

Applicants with superior academic credentials but lacking the required background can be admitted subject to their taking the necessary preparatory courses. Applicants are expected to have an average of "B" or better in their undergraduate coursework.

Course Requirements

REQUIRED COURSES

A. A total of 33 semester hours is required. The core curriculum consists of 15 credits and includes:

CS 400	Advanced Programming in C
CE 410	Introduction to Computer Architecture
CE 471	Computer Communications I: Systems Analysis
CE 448D	Introduction to VLSI Design
or CE 447	Logic Synthesis Using FPGAs
EE 443	Applied Digital Signal Processing

B. The remaining 18 credits are elective. Courses maybe taken in the following areas of concentration:

- Microelectronics
- Computer Architecture
- Signal and Image Processing
- Communication and Networking
- Robotics and Automation
- Computer Science

Elective courses include Advanced VLSI Design, Parallel Processing, Image Processing, Adaptive Signal Processing, Local Area Networks, Introduction to Robotics, Computer Vision and Advanced Robotics.

C. Students may opt to do an independent project or thesis as part of the 18 credits of electives. Students not selecting this option must take a comprehensive examination.

Computer Science *Master of Science*

Chair: Stephen Grodzinsky
Dana Hall
(203) 576-4145

The Master's degree in computer science is intended to prepare individuals with a strong mathematical, scientific or technical background for entry into the computer science field at an advanced level and for further study leading to the doctorate. Admission to the program requires an undergraduate background that includes elementary physics and calculus sequences, linear algebra, and either differential equations or numerical analysis and the following fundamental coursework in computer science:

- Programming Languages and Techniques
- Data Structures
- Digital Design
- Discrete Structures
- Probability and Statistics
- Microprocessors

Applicants with superior academic credentials but lacking the required background can be admitted subject to their taking the necessary preparatory courses. Applicants are expected to have an average of "B" or better in their undergraduate coursework.

Course Requirements

REQUIRED COURSES

A. A total of 33 semester hours is required. The core curriculum consists of 18 credits and includes:

CS 400	Advanced Programming in C
CS 402	Advanced Structures and Algorithems
CS 403	Operating Systems
CS 420	Theory of Computation
CS 450	Data Base Design
CPE 471	Computer Communication I

Students may opt to choose an area of concentration within the program. Such areas include software, systems and theory and foundations. The department maintains a list of courses that apply to each area.

B. The remaining 15 credits are electives. Such courses may include:

- Parallel Processing
- Artificial Intelligence
- Computer Graphics
- Java Programming
- Software Engineering
- Robotics
- Advanced Data Base Design
- Programming Languages
- Machine Perception

C. Elective Courses

Students may opt to do an independent project or thesis as part of the 15 credits of electives. Students not selecting this option must take a comprehensive examination.

Counseling and Human Resources *Master of Science*

Chair: Joseph E. Nechasek
South Hall, Room 127
(203) 576-4175

The Department of Counseling and Human Resources offers a Masters of Science degree in Counseling with emphasis in Community Agency Counseling, Counseling the Aging and Human Resource Development. All programs require a minimum of 40 credits.

Academic Policy and Procedures

Students will plan an individualized program with their advisor in which graduate transfer credit may be included. Credit for life-work experience may also be an option for those with appropriate experience. With this flexibility, students will have the opportunity to build a more individually tailored program to meet their specific needs and to move within the program at a pace that is suitable for them. Courses are offered during the day and evening hours. Programs may be completed on a full-time basis or over several years on a part-time basis within a seven year period.

A supervised field experience (practicum) is a key element of all specializations. Practicum is the experiential application of the theory and skills developed in the program in a professional environment such as community agency, or business setting.

Core Requirements

Masters' students in all specializations in the Department of Counseling and Human Resources are required to complete the following core courses.

COUNSELING CORE COURSES

COUN 505	Helping Relationships	3
COUN 510	Counselor as Professional	3
COUN 521	Group Process	3
COUN 523	Intro. to Counseling Theories	3
COUN 524	Strategies & Techniques of Counseling	3
COUN 524E	Supervised Practicum	3
or COUN 524H	Internship I	
COUN 524E	Supervised Practicum	3
or COUN 524H	Internship II	
EDUC 500	Research Methods	3
COUN 590	Masters Project	1
		25

Students undecided about which program to follow and who would like an introduction to the counseling field are encouraged to take Counseling 505, 521 and 523 as their initial courses.

Evaluation Procedure

Students are evaluated at three different levels following admission into the Counseling and Human Resource Department.

a. prior to acceptance as a DEGREE CANDIDATE. After completing 12 credits in the program, a student must apply for Degree Candidacy.

b. prior to PRACTICUM. A student must apply for practicum to be taken in the final two semesters.

c. prior to GRADUATION.

Evaluation at each level will be based on the following criteria:

1. Academic performance:
   a. 3.0 cumulative average
   b. No "E" grades outstanding at each evaluation level
   c. A grade of "B" or better in core counseling courses
2. Professional performance:
   a. demonstrate emotionally stable behavior in academic and professional settings
   b. demonstrate appropriate interpersonal relationship skills
   c. demonstrate personal maturity and ethical behavior

If any of the above criteria are not met, a student may be:

a. required to repeat a course
b. placed on probation
c. given a leave of absence
d. asked to withdraw

The above actions will be based on a majority decision of the faculty.

Admission to Practicum

Practicum will be taken during the final two semesters after successfully completing Counseling 505, 510, 521, 523 and 524.

Counseling 566 is a required prepracticum course for Community Agency majors.

Summary of Requirements

COUNSELING CORE COURSES

COUN 505	Helping Relationships	3
COUN 510	Counselor as Professional	3
COUN 521	Group Process	3
COUN 523	Intro. to Counseling Theories	3
COUN 524	Strategies & Techniques of Counseling	3
COUN 524E	Supervised Practicum *or*	3
COUN 524H	Internship I	
COUN 524E	Supervised Practicum *or*	3
COUN 524H	Internship II	
EDUC 500	Research Methods	3
COUN 590	Masters Project	1
		25

The remaining 15 semester hours of coursework will vary according to chosen specializations.

COMMUNITY AGENCY COUNSELING

COUN 566	Counseling and Psychopathology	3
COUN 526	Counseling the Addicted	3
COUN 516	Social and Cultural Foundations	3
COUN 580D	Spec Topics in Counseling (Electives)	6
		15

HUMAN RESOURCE DEVELOPMENT

MGMT 500	Management Theory	3
MGMT 511	Human Resource Management	3
MGMT 530	Organizational Development	3
COUN 565	Skills for Human Resource Professional	3
COUN 580D	Spec Topics in Counseling(Elective)	3
		15

COUNSELING THE AGING

COUN 527	Counseling the Aging I	3
COUN 529	Mid-Life Counseling	3
COUN 566	Counseling and Psychopathology	3
COUN 580	Grief and Loss	3
COUN 580D	Spec Topics in Counseling (Electives)	3
		15

Total **40**

Education *Master of Science Degree (Plan A)*

Director: Allen Cook
South Hall, Room 118
(203) 576-4198

This degree program provides advanced study for certified teachers, for persons interested in careers related to school age students, or for persons seeking certification to teach on the elementary, middle or secondary levels.

Students may concentrate their graduate studies in the School of Education by following one of two approaches:

PLAN A

M.S.E.D. Degree *(33 semester hours)*
General Program or Certification Program

PLAN B

M.S.E.D. Degree *(33 credits)*
For Certified Teachers
Modified Alternative Program (MOD MAP)

INTERN PROGRAM

An Internship option is available for those seeking the Master's Degree. Students are placed in a cooperating school system for one school year (180) days. This internship is designed to afford a maximum of field experience in the schools prior to student teaching. It also earns thirty-three tuition credits, a stipend, and represents nine credits towards the degree.

Plan A

Plan A provides educators with the opportunities for in-depth study of techniques and materials appropriate to contemporary classrooms within a structured framework of field concentration and professional development. All programs must be planned on an individual basis with an advisor from the department. Emphasis is placed on selected areas of concentration and professional course work for the development of individual competence.

There are several options available to students who proceed through Plan A in graduate study:

a. Those in the general program will have up to 12 elective credits available beyond the prescribed courses for the Master's Degree.

b. Individuals seeking Connecticut certification must take the courses required for the teaching license. Certification courses taken in an undergraduate program may be waived at the graduate level. Individuals seeking the certification may also select the Internship option.

The following certification tracks are available: Elementary (K-6); Middle grades (4-8), Music (K-12); Secondary-Biology, Business, Chemistry, Earth Science, English, Math, History and Social Studies; Remedial Reading and Remedial Language Arts.

ADMISSION INTO MASTER'S DEGREE PROGRAM

Requirements for admission include:

1. Bachelor's Degree
2. Two recommendations
3. Grade Point Average of 2.75 (Waiver may be requested)
4. Essay indicating intentions in pursuing the degree and the career in education

General Program

(33 SEMESTER HOURS)

The General Education Track is recommended for international students who wish to study American education in depth, for those who desire the Master of Science Degree, for those who wish to pursue a planned program of studies beyond the Master's Degree.

PROGRAM REQUIREMENTS

Educ 500	Research and Report Writing	3
Educ 502	History & Phil. of Education	3
or Educ 504	Comparative & International Education	3
Educ 558	Evaluation of Instructional Outcomes	3
Educ 565	Contemporary Problems in Education	3
Educ 590	Computer Literacy	1-2
Educ 591	Software Evaluation	1-2

ELECTIVES

Select other graduate courses with permission of advisor 9-12

FINAL DEGREE OPTION

(CHOOSE ONE)

Educ 566	Contemporary Problems in Education II (Project)	3
Educ 595	Thesis	2-6

Certification Tracks

Candidates for State Certification must meet the following requirements prior to the teacher preparation portion of their training:

1. Bachelor's Degree
2. Subject major, other than professional education
3. United States History
4. Thirty-nine credits in general education, including courses in five of the follow ing: Arts, English, Foreign Language, Math, Science, Social Science.
5. After July 1, 1999 this changes to thirty-nine credits in general education, including two courses in English, two courses in Math, two courses in Science, two courses in Social Science and one course in either Arts or Foreign Language
6. Passage of PRAXIS I, or waiver on SAT of 1000 (if taken prior to March 31, 1995).

ADMISSION INTO THE CERTIFICATION TRACK

All candidates seeking State Certification must apply for admission into the Certification Track after 12 graduate credits.

Requirements are:

1. Passage of PRAXIS I, or waiver on SAT (at least 400 on verbal and quantitative) of 1000.;
2. Certification essay; Grade point average of 3.0 after graduate credits.

Education *Master of Science Degree (Plan A)*

Elementary Certification Track

(39 SEMESTER HOURS: 33 FOR DEGREE PLUS STUDENT TEACHING)

The graduate student may obtain both the Master of Science Degree and Teacher Certification by pursuing a course of study within the Elementary Education Track.

PROGRAM REQUIREMENTS

Educ 440C	Methods/Materials, Teaching Language Arts	3
Educ 441C	Methods/Materials, Teaching Mathematics	2
Educ 442C	Methods/Materials, Teaching Social Studies	2
Educ 443C	Methods/Materials, Teaching Science	2
Educ 500	Research and Report Writing (Waived if Intern)	3
Educ 502 *or* 504	Philosophical Foundations	3
Educ 509	Educational Psychology	3
Educ 511A	Health-Related	.5
Educ 511B	Intergroup Relations	.5
Educ 530	Human Growth & Dev. I	3
Educ 564	Education of the Exceptional Student	3
Educ 574	Developmental Reading	3
Educ 590	Computer Literacy	
or 591	Software Evaluation	1-3
Educ 450-515	Field Experience	1-6
Educ 348	Student Teaching	6
(cannot be credited towards the degree)		

ELECTIVES

Educ 510	Intern Training	2
Educ 536C	Children's Literature	2
Educ 565	Contemporary Problems in Educ. I	3

FINAL DEGREE OPTION

(CHOOSE ONE)

1. Educ 566 Contemporary Problems in Education (Project) 3
2. Educ 595 Thesis 2-6
3. AVAILABLE ONLY TO THOSE IN CERTIFICATION TRACK — must take both levels of tests
   a. CONNTENT Exams – PRAXIS II (Elementary, Middle or Secondary)
   b. Professional Knowledge – from NTE CORE battery.

Middle Grades Education Certification Track

(39 SEMESTER HOURS: 33 FOR DEGREE PLUS STUDENT TEACHING)

The graduate student may obtain both the Master of Science Degree and Teacher Certification by pursuing a course of study within the Middle Grades Certification Track.

PROGRAM REQUIREMENTS

Educ 500	Research and Report Writing	3
Educ 502 *or* 504	Philosophical Foundations *(waived if intern)*	3
Educ 511A	Health	.5
Educ 511B	Intergroup Relations	.5
Educ 560M	Human Growth and Develop.II	3
Educ 564	Education of the Exceptional Student	3
Educ 575M	Reading in the Content Area	3
Educ 590	Computer Literacy	1
Educ 591	Software Evaluation	1-2
Educ 450 *or* 515	Field Experience	1-6
Educ 348M	Student Teaching (cannot be credited towards the degree)	6

CHOOSE ONE

Educ 440M	Methods/ Materials, Teaching Language Arts	3
Educ 536M	Adolescent Literature	3

CHOOSE TWO

Educ 440M	Methods/Materials, Teaching Language Arts	3
Educ 441M	Methods/Materials, Teaching Mathematics	3
Educ 442M	Methods/Materials, Teaching Social Studies	3
Educ 443M	Methods/Materials, Teaching Science	3

ELECTIVES

Educ 510	Intern Training	2
Educ 565	Contemporary Problems in Education	3

FINAL DEGREE OPTION

(CHOOSE ONE)

1. Educ 566 Contemporary Problems in Education (Project) 3
2. Educ 595 Thesis 2-6
3. AVAILABLE ONLY TO THOSE IN CERTIFICATION TRACK – must take both levels of tests

b. CONNTENT Exams- PRAXIS II (Elementary, Middle or Secondary)

b. Professional Knowledge- from NTE CORE battery.

Secondary Education Certification Track

(39 SEMESTER HOURS: 33 FOR DEGREE PLUS STUDENT TEACHING)

PROGRAM REQUIREMENTS

Educ 500	Research and Report Writing	3
Educ 502 *or* 504	Philosophical Foundations	3
Educ 509	Educational Psychology	3
Educ 511A	Health-Related	.5
Educ 511B	Intergroup Relations	.5
Educ 564	Education of the Exceptional Student	3
Educ 392	Student Teaching (cannot be credited towards the degree)	6

ELECTIVES

Educ 565	Contemporary Problems in Education	3
Educ 575	Reading in the Content Area	3

FINAL DEGREE OPTION

(CHOOSE ONE)

1. Educ 566 Contemporary Problems in Education (Project) 3
2. Educ 595 Thesis 2-6
3. AVAILABLE ONLY TO THOSE IN CERTIFICATION TRACK- must take both levels of tests

b. CONNTENT Exams- PRAXIS II (Elementary, Middle or Secondary)

b. Professional Knowledge- from NTE CORE battery.

CHOOSE SPECIFIC CERTIFICATION AREA

BIOLOGY

REQUIREMENTS

Biology major or 30 credits, plus nine credits in related subject(s)

Educ 443J Methods/Materials, Teaching Science 3

BUSINESS EDUCATION

REQUIREMENTS

Business major or 30 credits, plus nine credits in related subject(s)

Educ 445 Methods/Materials, Teaching Business 3

CHEMISTRY

REQUIREMENTS

Chemistry major or 30 credits, plus nine credits in related subject(s)

Educ 443J Methods/Materials, Teaching Science 3

EARTH SCIENCE

REQUIREMENTS

Earth Science major or 30 credits, plus nine credits in related subject(s)

Educ 443J	Methods/ Materials, Teaching Science	3

ENGLISH

REQUIREMENTS

English major or 30 credits, plus nine credits in related subject(s)

Educ 440J	Methods/Materials, Teaching Language Arts	3
Educ 536J	Adolescent Literature	3
Educ 575J	Reading in the Content Area	3

MATHEMATICS

REQUIREMENTS

Math major or 30 credits, plus nine credits in related subject(s)

Educ 441J	Methods/Materials, Teaching Mathematics	3

HISTORY AND SOCIAL STUDIES

REQUIREMENTS

History major plus 18 credits in other social sciences; or major in Anth., Soc., Pol. Sci., Geo, Eco, plus 18 credits in history

Educ 442J	Methods/Materials, Teaching Social Studies	3

Music Education Certification Track

(39 SEMESTER HOURS: 33 FOR DEGREE PLUS STUDENT TEACHING)

Requirements — Music major

PROGRAM REQUIREMENTS

Mus Ed 343	Methods/Materials, Teaching Music, Elementary	3
Mus Ed 380	Methods/Materials, Teaching Music, Secondary	3
Educ 500	Research and Report Writing (Waived if Intern)	3
Educ 502 *or* 504	Philosophical Foundations	3
Educ 509	Educational Psychology	3
Educ 511A	Health-Related	.5
Educ 511B	Intergroup Relations	.5
Educ 564	Education of the Exceptional Student	3
Mus Educ 390	Student Teaching (cannot be credited toward the degree)	6

ELECTIVES

Educ 565	Contemporary Problems in Education	3
Educ 575	Reading in the Content Area	3

Remedial Reading and Remedial Language Arts Teacher

(33 SEMESTER HOURS)

The graduate student who has teacher certification may concentrate on a Specialty in Remedial Reading and Remedial Language Arts.

PREREQUISITE REQUIREMENTS

Educ 502	Philosophical Foundations	3
Educ 509	Psychological Foundations	3
Educ 564	Education of the Exceptional Student	3
Educ 440	Methods/Materials, Teaching Language Arts	3
Educ 536	Children's or Adolescent Literature	2-3

PROGRAM REQUIREMENTS

Educ 500	Research and Report Writing	3
Educ 558	Evaluation of Instructional 3 Outcomes	
Educ 571	Diagnosis and Intervention of Reading and Language Arts Difficulties	3
Educ 574	Developmental Reading	3
Educ 575	Reading in the Content Area	3
Educ 590	Computer Literacy	1-2
Educ 591	Software Evaluation	1-2
Educ 597	Reading Practicum	6
Electives		
Total		**33**

Education *Master of Science Degree (Plan B)*

Chair: Allen Cook
South Hall, Room 118
(203) 576-4198

This degree program provides advanced study for certified teachers and for persons interested in careers related to school-age students.

Modified Alternative Program (MOD MAP)

(33 SEMESTER HOURS)

Plan B is designed for students who are certified teachers or who wish to pursue a Master's degree in education with greater flexibility than a program leading to certification.

MOD MAP is an alternative approach to graduate study which combines a basic core with elective modules (MOD). In the needs analysis and assessment, core students analyze their own experience and determine competencies they wish to achieve. In the final core requirement students demonstrate those competencies in a clinical and a research setting.

Maximum flexibility has been built in by the wide variety of learning modules, workshops, and independent learning activities offered through which students may gain competencies.

Summary of Requirements

PROGRAM REQUIREMENTS

EDMM 500	Analysis, Assessment & Planning Core	3
EDMM 598	Clinical Experience (should be taken near end of program)	2
Educ 566 or 595	Project or Thesis	3
		8

ELECTIVES

(Choose among the following)

Educ 580C	Independent Study—Elementary	1-6
Educ 580J	Independent Study-Secondary	1-6
EDMM 599	Self-Directed Study Modules	3-6
EDMM 600	A-Z Instructional Modules	18-25
EDMM 600A	Reading	1-3
EDMM 600B	Mathematics	1-3
EDMM 600C	Social Studies	1-3
EDMM 600D	Science	1-3
EDMM 600E	Exceptional Children, Gifted Students	1-3
EDMM 600F	Art 1-3 SDS 599G, Foreign Languages	1-3
EDMM 600H	Home Economics	1-3
EDMM 600J	Industrial Arts, Vocational Education	1-3
EDMM 600K	Curriculum Studies	1-3
EDMM 600L	Language Arts	1-3
EDMM 600M	Music	1-3
EDMM 600N	Physical Education	1-3
EDMM 600P	Drama	1-3
EDMM 600Q	Early Childhood Education	1-3
EDMM 600R	Guidance and Human Development	1-3
EDMM 600S	Educational Tech. and Computers	1-3
EDMM 600T	Adult Educ. and Parent Educ.	1-3
EDMM 600U	Leadership, Admin., and Supervision	1-3
EDMM 600V	Classroom Mngm and Teaching Skills	1-3
EDMM 600W	Educational Law and Legal Issues	1-3
EDMM 600X	Testing and Evaluation	1-3
EDMM 600Y	International Education	1-3
EDMM 600Z	Foundations of Education	1-3
		25

Several programmatic arrangements are available through MODMAP from the School of Education and Human Resources office.

TOTAL **33**

Education *Sixth Year Degree*

Chair: Allen Cook
South Hall, Room 118
(203) 576-4198

This program is for teachers who wish to obtain an additional graduate degree beyond the Master's degree. The format of the program facilitates an innovative and flexible approach which can respond to the most current trends in education and will further the skills and competence of the student.

The student may concentrate in either elementary or secondary education.

Summary of Requirements

PROGRAM REQUIREMENTS

EDMM 500	Analysis, Assessment and Planning Core	3
Educ 598	Clinical Assessment	2
Educ 669 or 695	Project or Thesis	3
		8

(Choose among the following)

ELECTIVES

ELEMENTARY EDUCATION
Choose Elementary Modules or Independent Study
Secondary Education
Choose Secondary Modules or Independent Study

EDMM 600A	Reading	1 - 3
EDMM 600B	Mathematics	1 - 3
EDMM 600C	Social Studies	1 - 3
EDMM 600D	Science	1 - 3
EDMM 600E	Exceptional Children, Gifted Students	1 - 3
EDMM 600F	Art 1-3 SDS 599G, Foreign Languages	1 - 3
EDMM 600H	Home Economics	1 - 3
EDMM 600J	Industrial Arts, Vocational Education	1 - 3
EDMM 600K	Curriculum Studies	1 - 3
EDMM 600L	Language Arts	1 - 6
EDMM 600M	Music	1 - 3
EDMM 600N	Physical Education	1 - 3
EDMM 600P	Drama	1 - 3
EDMM 600Q	Early Childhood Education	1 - 3
EDMM 600R	Guidance and Human Development	1 - 3
EDMM 600S	Educ. Technology and Computers	1 - 3
EDMM 600T	Adult Education and Parent Education	1 - 3
EDMM 600U	Leadership, Administration, and Super.	1 - 3
EDMM 600V	Classroom Manage. & Teaching Skills	1 - 3
EDMM 600W	Educational Law and Legal Issues	1 - 3
EDMM 600X	Testing and Evaluation	1 - 3
EDMM 600Y	International Education	1 - 3
EDMM 600Z	Foundations of Education	1 - 3
		22

Several programmatic arrangements are available through ModMAP from the School of Education and Human Resources Office.

TOTAL SEMESTER HOURS **30**

Educational Administration & Supervision

Sixth Year Professional Diploma

Chair: James T. Hamilton
South Hall, Room 110
576-4192

The Sixth Year Program leading to the Professional Diploma in Educational Leadership is designed to meet requirements leading to certification for various administrative and supervisory positions in the State of Connecticut, such as Elementary or Secondary Principal Subject Area Consultant, Curriculum Coordinator, Department Head, Director of Instruction. Programs in each of the areas are planned to meet State Certification requirements.

A student who holds a Master's degree from an accredited college or university may enroll in the Sixth Year program. The program consists of thirty semester hours and is planned on an individual basis to meet particular needs and interests.

Sixth Year Professional Diploma Summary of Requirements

(30 SEMESTER HOURS)

REQUIRED CORE *(15 SEMESTER HOURS)*

EDMG 611	Admin. Org. & Staffing Educ. Institutional Institutions	3
EDMG 612	Planning Est. Direction for Educ. Inst	3
EDMG 613	Leadership Influencing People to Achieve Institutional Objectives	3
EDMG 619	Public School Law	3
EDMG 652	Supervision, the Evaluation and Professional Development of Education	3
		15

ELECTIVES

EDMG 603	Computer Uses in Educational Mgmt.	3
EDMG 618	Public School Finance	3
EDMG 651	Workshop in Curriculum Dev't	3
EDMG 679	Departmental Seminar in the Mgmt. of Educational Institutions	3
EDMG 680A	Ind. Study in Educational Mgmt.	1-6
EDMG 681A	Internship in Educational Mgmt.	1-6
EDMG 682	Special Topics in Educational Mgmt	1-3

Electives offered by other departments or colleges, and related to the field of Educational Management, may be selected under advisement.

Total Semester Hours 30

Intermediate Administrator Certification Track Summary of Requirements

(30 SEMESTER HOURS)

CERTIFICATION REQUIRES ONE COURSE IN EACH OF THE FIVE AREAS, AND A TOTAL OF 18 CREDITS BEYOND THE MASTERS

I. Psychological/Pedagogical

ED 558	Evaluation of Instructional Outcomes	3
ED 560	Human Growth and Development	3
ED 600	Statistics and Research Design	3
EDMM 600	MODS	

II. Curriculum/Program Planning

ED 636G	Models of Curriculum Development	3
EDMG 551	Curr. Development/Implementation	3
EDMG 651	Workshop in Curriculum Development	3

III. School Administration

EDMG 603	Computer Uses in Educ. Management	3
EDMG 611	Administration Organizing and Staffing	3
EDMG 612	Planning: Establishing Directions	3
EGMG 613	Leadership: Influencing People	3
EDMG 618	Public School Finance	3
EDMG 619	Public School Law	3

IV. Personnel Evaluation/Supervision

EDMG 652	Supervision: Evaluation/Development	3

V. Contemporary Educational Problems/Policy Making

ED 565	Contemporary Issues in Educ. I	3
EDMG 601	Contemporary Educational Problems	3
EDMG 680A	Independent Study	1-6

ELECTIVES

ED 681A	Internship in Educ. Management	3-6
ED 682A	Special Topics in the Management of Educational Institutions	3
EDMG 618	Public School Finance	3
EDMG 651	Workshop in Curriculum Development	3
EDMG 679	Departmental Seminar in the Mgmt. of Educational Institutions	3
EDMG 680A	Ind. Study in Educational Mgmt.	1-6
EDMG 681A	Internship in Educational Mgmt.	1-6
EDMG 682	Special Topics in Educ. Mgmt.	1-3

Electives offered by other departments or colleges, and related to the field of Educational Management, may be selected under advisement.

NOTE: Psychology 505 and Educational Management 551 or equivalents are required if they were not completed at the Master's level. Deficiencies in these areas must be made up in addition to requirements and electives described above.

ED 564 Must be completed for certification.

Total Semester Hours 30

Educational Leadership *Doctor of Education Degree*

Chair: James T. Hamilton
South Hall, Room 110
(203) 576-4198

The Doctoral Program in Educational Management offered by the University of Bridgeport is the first of its kind in Connecticut. It is designed to improve the effectiveness of experienced administrators by integrating the study and practice of sound educational and management principles. Successful completion of the program leads to the Doctor of Education degree.

As an advanced degree program focusing on the renewal of practicing administrators, the Doctoral Program takes into consideration the needs of such personnel in terms of both the content of the curriculum and program organization. It is offered on a part-time basis at the University of Bridgeport campus. Courses and seminars are scheduled around the job demands of the working administrator.

Summary of Requirements

(62 SEMESTER HOURS)

1. Three years formal study

YEAR ONE AND YEAR TWO

FALL - 8 semester hours
SPRING - 8 semester hours
SUMMER - 6 semester hours

YEAR THREE

FALL - 6 semester hours
SPRING - 6 semester hours
SUMMER - 6 semester hours

The following courses are offered on a rotating basis. Each course carries six semester hours.

EDMG 801	Educational Program Development
EDMG 802	Community Analysis and Ad. Decisions
EDMG 803	Organizational Analysis & Development
EDMG 804	Constitutional Legal and Political Issues Confronting Educational Leaders
EDMG 805	Policy Determination in the Development of Educ. Institutions
EDMG 806,	*Quantitative Analysis & Evaluation Strategies
EDMG 807	Management of Educational Institutions
EDMG 808	Human Relations, Communication and Decisionmaking
EDMG 809	International Education

*Quantitative Analysis and Evaluation Strategies is required

2. Residency

Twenty-five days for each of first three years

EDMG 800 Interdisciplinary Continuing Seminars

The seminars meet on six Fridays and Saturdays during the academic year and for two full weeks each summer. They provide opportunities for students to work with scholars and leaders from a variety of disciplines to broaden perspectives on educational leadership and to develop an intellectual style for dealing with educational problems. The seminars are planned with student input.

3. EDMG 845

Dissertation Preparation Seminars

During the third year of the program students participate in seminars during the fall, spring and summer sessions which focus on the selection and development of a dissertation proposal. Students are ordinarily expected to complete the major portion of their work on the dissertation proposal prior to the conclusion of the formal part of the program.

4. Comprehensive Examination

The major thrust of the comprehensive examination is to test the student's ability to utilize knowledge and skills gained through formal instructional activities in addressing the solution of educational problems. The examination is based upon the individual student's program of study. It is ordinarily scheduled following completion of all course and seminar work, and prior to submission of the formal dissertation proposal.

5. Dissertation

(MINIMUM - ONE YEAR)

The individual dissertation represents the student's major effort during the program. It will focus on a significant problem in Educational Leadership which addresses a local, regional or national need, and relates to the personal needs and interests of the student. Ideas for dissertations will ordinarily emerge from the courses, the continuing seminars, personal contact with the faculty, on-the-job experience or requests for assistance from schools, school systems, or professional organizations. The student is expected to take at least one calendar year to complete the dissertation.

Each student has a three-member dissertation committee.

NOTE: Completion of Doctoral Degree

The degree must be completed within seven years of the date from which the student started coursework in the doctoral program. In exceptional cases the department may recommend that the Dean grant an extension of this limit.

Electrical Engineering *Master of Science*

Chair: Wenelin Janeff
Technology Building
(203) 576-4296

This program is designed to increase the student's knowledge and competence in basic areas necessary to modern Electrical Engineering while affording sufficient freedom to allow an in-depth study of such areas as communications, control systems, electromagnetics, electronics and digital signal processing.

ADMISSION REQUIREMENT

Students must have a Bachelor of Science in Electrical Engineering or a related field. In both cases, the department may require make-up of background deficiencies.

COURSE REQUIREMENTS

A. A total of 30 semester hours is required in an approved program of study.

B. Three of the following courses are required: EE437, Microwaves; EE541, Communications; EE545, Controls; EE582, Electronics.

C. The Master's thesis is optional. If undertaken, it counts as 6 semester hours and must be conducted under the supervision of an EE department faculty member.

D. Normally no more than two graduate courses may be taken from another department. Exceptions require EE Department approval.

E. It is recognized that not all students will have the necessary depth of study in their preparatory program for the MSEE. Consequently, if judged necessary in a particular program of study, the department may permit a maximum of two undergraduate electives to be taken for graduate credit.

F. Programs of Study will ordinarily consist of a minimum of 30 semester hours and include at least 12 semester hours from the following courses.

EE 436D	Network Synthesis
EE 437	Microwaves
EE 440	Random Processes
EE 443	Applied Digital Signal Processing
EE 448D	Introduction to VLSI Design
EE 455	Microwave Laboratory
EE 496D	Digital Signal Processing Laboratory
EE 541	Digital Communication Systems
EE 545	Advanced Control Theory
EE 582	Advanced Topics in Electronics
EE 597	Advanced Problems in Electrical Engineering
EE 598	Thesis in Electrical Engineering

Management Engineering *Master of Science*

Chair: Paul Bauer
Dana Hall
(203) 576-4379

The Management Engineering Master's Program is designed to develop leaders adept at managing technological change, and skilled in establishing and maintaining superior competitive advantage for their respective enterprises. For an enterprise, continuing advancement of technology provides both opportunities and threats. It is essential that an enterprise continually establish proprietary technology as well as incorporate the latest relevant technology in products, production, and distribution processes. The UB Management Engineering Program is specifically designed to develop skills such as:

1. Identifying and evaluating the impact of relevant changing technology;

2. Designing programs to develop a proprietary technological advantage;

3. Managing both the execution of those programs and the integration of their results into the mainstream of product design and production/distribution operations.

COURSE REQUIREMENTS

A. A total of 30 semester hours is required in an approved program of study;

B. Completion of the following core courses:

Management 484:
Product Costing & Economic Analysis of Investments

Management 505:
Project Management

Management 521:
Technology & the Competitive Enterprise

C. Completion of at least one course in quality control management. Management Engineering 424 is designed for those not specializing in Q.C.;

D. Completion of at least one course in quantitative methods for analysis of production and distribution systems. Management 475. Quantitative Methods in Production Management, is designed for those not specializing in quantitative analysis of operations;

E. Completion of at least one course at an appropriate level based on prior training in production and operations management (see offerings in the College of Business);

F. Completion of an appropriate course in organization theory or behavior; and

G. Six semester hours of electives from 400 or 500 level courses offered by the College of Business or the College of Science, Engineering and Technology. The objective of these electives should be to support a career objective while broadening the student's technological horizons.

As a prerequisite for the program, all students are expected to have a demonstrated familiarity with statistical analysis. Any remedial course taken to meet this requirement will not be considered as an elective. Students are also expected to possess prior facility with word processor and spreadsheet programs.

MANAGEMENT ENGINEERING

MGE 424	Quality Control Methods
MGE 475	Quantitative Analysis
MGE 484	Product Costing & Economic Analysis
MGE 505	Project Management
MGE 521	Technology & the Competitive Enterprise
MGE 530	On-Line Quality Control Methods
MGE 532	Contracting & Acquisition Management
MGE 535	Off-Line Quality Control Methods
MGE 540	Advanced Simulation Techniques
MGE 555	Contemporary Topics In Technology Management
MGE 597	Advanced Problems in Management Engineering
MGE 598	Thesis in Management Engineering

**The 400-level courses are open to an academically qualified undergraduate student with Department permission required.*

Mechanical Engineering *Master of Science*

Chair: Richard Schile
Dana Hall
(203) 576-4343

This program permits the student to increase his/her knowledge and competence in basic areas necessary to Mechanical Engineering while affording sufficient freedom to provide in-depth study in such areas as solid mechanics, structural dynamics, fluid mechanics, heat transfer, mechanical design and aerospace-oriented subjects. Admission requirements include a Bachelor of Science degree from an accredited Mechanical Engineering curriculum and make-up of any deficiencies existing in previous training.

COURSE REQUIREMENTS

Programs of Study will ordinarily consist of a minimum of 30 semester hours and include at least 12 semester hours from the following courses:

ME 410	Advanced Fluid Dynamics	3
ME 451	Advanced Strength Analysis	3
ME 452	Advanced Vibrations I	3
ME 454	Advanced Dynamics I	3
ME 463	Advanced Heat Transfer	3
Math 401	Advanced Analysis for Scientists and Engineers I	3
Math 402	Advanced Analysis for Scientists and Engineers II	3

Students must elect one of the following to satisfy state licensure requirements for the M.S. degree: comprehensive examination, completion of a thesis, or completion of a 3 semester hour independent project. If a thesis is written, the remainder of the program must be in the Mechanical Engineering department. If no thesis is written, 3 semester hours may be taken in a related engineering field with the balance of the program to be in Mechanical Engineering courses. In all cases at least 3 courses must be in a sequence which provides depth in a specific area.

ELECTIVE COURSES

All courses are 3 semester hours unless otherwise noted. Design-oriented courses are designated by suffix "D."

ME 409	Advanced Thermodynamics
ME 410	Advanced Fluid Dynamics
ME 417	Control Systems Engineering
ME 450	Structural Mechanics
ME 451D	Applied Stress Analysis
ME 452	Advanced Vibrations I
ME 453	Finite Element Methods in Mechanical Engineering
ME 454	Advanced Dynamics I
ME 456	Mechanics of Composite Materials
ME 458D	Fatigue and Fracture Mechanics
ME 463	Advanced Heat Transfer
ME 497	Advanced Problems in Mechanical Engineering
ME 505	Theory of Plates and Shells
ME 510	Theoretical Fluid Mechanics
ME 511	Fixed and Rotary Wing Aircraft Principles
ME 513	Gas Turbines I
ME 514	Advanced Gas Dynamics
ME 560	Helicopter Aerodynamics and Performance
ME 566	Turbomachinery
ME 567	Gas Turbines II
ME 596	Master's Project
ME 598	Thesis in Mechanical Engineering

COLLEGE
OF
BUSINESS
ADMINISTRATION

Undergraduate Courses of Instruction

Courses bearing two numbers joined by a dash, such as Education 337-338, extend through two semesters, and no graduation credit is given for one semester's work unless otherwise authorized by the dean or director of the college or school concerned. Courses bearing only one number are complete in themselves. If they have a consecutively numbered companion course, the two are listed separately or with their numbers joined by a comma — as with History 101, 102 — to indicate that credit is given for one semester's work.

Courses numbered 100-199 are intended primarily for freshmen; courses numbered 200-299, for sophomores; and courses 300-399, for juniors and seniors. Courses num-bered 400-499 are graduate courses (undergraduate students may check with the dean's or director's office to determine if registration in 400-level courses is possible). Courses numbered 500 and above are exclusively for graduate students. Some advanced courses are not taught every year but are scheduled in cycles.

The University reserves the right to limit the number of students registered in any course and to cancel any course for which there is insufficient enrollment.

Under a reciprocal agreement, a full-time student at the University of Bridgeport may take certain courses at Fairfield or Sacred Heart Universities and Bridgeport Engineering Institute without payment of extra fees, provided that (1) the course is not currently offered by the University of Bridgeport; (2) the course is on an approved list; (3) the student has prior permission from his dean or director to take the course; (4) tuition commitments have been met in full at the University of Bridgeport; and (5) the student observes all regulations of the host institution.

Accounting

ACCOUNTING 101

Financial Accounting.

Examination of accounting concepts and principles, oriented toward the users of financial statements including investors, managers, creditors, and others. Attention given also to current practice in accounting for major asset and liability classifications, ethical considerations and international practices.
3 semester hours

ACCOUNTING 210

Accounting Sytems and Controls.

The technical aspects of using accounting systems for financial accounting measurement, cost accounting systems and budgetary systems for government and not-for-profit enterprises. Includes general ledger systems and control systems for cash, receivables and payables, inventories, fixed assets and payroll, and job-order, process and standard cost systems. Emphasis on computer processing of accounting data. Prerequisite: Accounting 101.
3 semester hours

ACCOUNTING 308

Financial Reporting and Analysis.

An overview of generally accepted accounting principles underlying the content of financial statements including alternative inventory valuation methods, lease accounting, segment reporting and reporting for employee benefit plans. Study and analysis of actual corporate annual reports and government and not-for-profit financial statements. Prerequisite: Accounting 101.
3 semester hours

ACCOUNTING 321

Accounting Standards and Reporting.

Study of standard setting in establishing generally accepted accounting principles with emphasis on pronuncements of the Financial Accounting Standard Board and reporting requirements of the Securities and Exchange Commission. Prerequisite: Accounting 308.
3 semester hours

ACCOUNTING 322

Accounting Practice.

Problem solving in selected topics including lease accounting, inter and intra-period tax allocation and deferral, employee benefit plans, segment reporting and accounting for business mergers and acquisitions and financial statement consolidations. Prerequisite: Accounting 308.
3 semester hours

ACCOUNTING 327

Multinational Accounting.

A global perspective of accounting practices. Development and role of accounting in selected countries, comparative practices in financial reporting and disclosure, setting international accounting standards, and examinations of auditing and taxation issues. Prerequisite: Accounting 101.
3 semester hours

ACCOUNTING 329

Tax Law and Accounting.

An overview of tax laws and administration in the United States and other countries. Includes individual and business income taxation, taxation of property transfers, social security taxation and other forms of taxation used by governments to raise revenue. Prerequisite: Accounting 101.
3 semester hours

ACCOUNTING 331

Managerial Accounting.

A course for future managers to understand the uses and limitations of internal accounting reports. Topics include profit planning, capital, master and flexible budgets, variable costing, break-even analysis, costing systems, incremental analysis and performance evaluation. Students make use of the personal computer. Prerequisite: Accounting 101.
3 semester hours

ACCOUNTING 332

Tax Law Compliance and Reporting.

Study and practice in the application of U.S. Federal income tax law. Advanced topics in individual, corporation, partnership, estate and trust taxation. Includes study of the role of the Internal Revenue Service in tax compliance. Prerequisite: Accounting 329.
3 semester hours

ACCOUNTING 335

Auditing.

Study of generally accepted auditing standards, practice and procedures in the audit of financial statements.Includes study of ethical issues and professional responsibilities of the Certified Public Accountant to investors, creditors and others who rely on the auditor's opinion when using audited financial statements to make decisions. Prerequisite: Accounting 308.
3 semester hours

Art & Design

The Art Department reserves the right to retain selected samples of student work.

A minimum of four hours of outside assignments per week is required in Studio Courses.

STUDIO FEES

Most studio courses have a fixed standard materials fee per course. *Studio fees listed are subject to change. Consult course schedules for current rates.*

Art & Design

ART & DESIGN 100

Introduction to Art & Design.

Introduction to art and design professions in the context of the majors available at the University.
1 two-hour lecture/discussion;
1 semester hour

ART & DESIGN C101

Fine Arts

Introduction to theories of value in the arts. Principles of aesthetics as historically applied to plastic and performing arts. Theories of Beauty and their critique in Western and non-Western contexts. Premodern, modern and post-modern approaches to the analysis of the arts and architecture. This course may include a studio or performing component. A Core Heritage Course.
2 periods, 1 discussion section;
3 semester hours

ART & DESIGN 103

Visual Organization I.

Problems in two-dimensional design and the interaction of color: the exploration of the elements of art and their interrelationships; visual and psychological factors involved in two-dimensional design and visualization. Introduces art and design presentation techniques including the portfolio. Emphasizes topics not covered in Art & Design 104.
2 three-hour studio periods;
3 semester hours

ART & DESIGN 104

Visual Organization II.

Problems in two-dimensional design and the interaction of color: the exploration of the elements of art and their interrelationships; visual and psychological factors involved in two-dimensional design and visualization. Introduces art and design presentation techniques including the portfolio. Emphasizes topics not covered in Art & Design 103.
2 three-hour studio periods;
3 semester hours

ART & DESIGN 105

Drawing I.

Fundamentals of drawing. Visualizing in two and three dimensions. An introduction to various media techniques and orthographic delineation methods including perspective drawing systems. Use of objects and figures in developing rapid visualization skills. Emphasizes topics not covered in course 106.
2 three-hour studios; 3 semester hours

ART & DESIGN 106

Drawing II.

Fundamentals of drawing. Visualizing in two and three dimensions. An introduction to various media techniques and orthographic delineation methods including perspective drawing systems. Use of objects and figures in developing rapid visualization skills. Emphasizes topics not covered in course 105.
2 three-hour studios; 3 semester hours

ART & DESIGN 108

3-D Design Materials & Model Techniques.

Fundamentals of three-dimensional design. The investigation of the interrelationships of spaces, planes, and volumes in three-dimensional structures. Materials such as paper, clay, plaster, plastic and wood will be introduced and explored for use in the construction of three-dimensional models. Students will be instructed in the use of model-making tools, equipment and processes appropriate to materials introduced.
2 three-hour studios; 3 semester hours

ART & DESIGN 110

Delineation & Graphics.

Introduces basic orthographic drafting techniques and technologies. Presentation and layout techniques used to enhance objects and environments. Introduces the representation of spatial designs including plans, views, elevations/sections, isometrics, axonometrics, perspectives, dimensioning and detail drawing. Provides basic introduction to computer-aided drafting.
2 three-hour studios; 3 semester hours

ART & DESIGN 113

Introduction to Computers.

Introduction to equipment in computer laboratory and word processing. Areas covered include the Mac, PC, storage devices, scanning and printing. Course structure consists of demonstration, lecture, and lab work.
1 semester hour

ART & DESIGN 117

Survey of Art History I.

The development of visual art from prehistoric civilizations through the Medieval period. Multicultural developments and the changing role of the artist in society will be emphasized.
3 periods lecture/discussion;
3 semester hours

ART & DESIGN 118

Survey of Art History II.

The development of visual art from the Renaissance through the 20th Century, focusing on the modern role of art and artists in a global context.
3 periods lecture/discusstion;
3 semester hours

ART & DESIGN 200

Co-op Work Experience.

Through the co-op program, the student will be placed in full-time and part-time

working positions in art, illustration, graphic design, industrial design and interior design. Prerequisite: 30 semester hours; by arrangement.
1-6 semester hours

ART & DESIGN 203
Typography I.
History, design and execution of letter forms. Projects include development of finished lettering in pen and brush. Emphasis on the arrangement of type in graphic design and the use of letter forms as elements of visual design.
2 three-hour studios; 3 semester hours

ART & DESIGN 205
Drawing III.
Advanced drawing techniques utilizing a variety of media and subjects. Investigates structure, materials and scale by illustrating and rendering figures, objects and environments. Emphasizes topics not covered in Art & Design 206 such as advanced orthographic drawing techniques. Prerequisite: Art & Design 105 and 106.
2 three-hour studios; 3 semester hours

ART & DESIGN 206
Drawing IV.
Advanced drawing techniques utilizing a variety of media and subjects. Investigates structure, materials and scale by illustrating and rendering figures, objects and environments. Emphasizes topics not covered in Art & Design 205 such as production and assembly drawings Prerequisite: Art & Design 105 and 106.
2 three-hour studios; 3 semester hours

ART & DESIGN 207
Illustration I.
A basic and intermediate course in translating written ideas into visual expression. Graduated exercises for developing visual symbols that adorns clarify and dramatize the printed word. Studies in books, magazines, advertising, fashion, children's literature, and mechanical illustration. Emphasizes topics not covered in Art & Design 208. Prerequisite: Art & Design 105 and 106 or permission of instructor.
2 three-hour studios; 3 semester hours

ART & DESIGN 208
Illustration II.
A basic and intermediate course in translating written ideas into visual expression. Graduated exercises for developing visual symbols that adorns clarify and dramatize the printed word. Studies in books, magazines, advertising, fashion, children's literature, and mechanical illustration. Emphasizes topics not covered in Art & Design 207. Prerequisite: Art & Design 105 and 106 or permission of instructor.
2 three-hour studios; 3 semester hours

ART & DESIGN 209
Painting I.
The principles of painting, through a series of visual problems, working from nature. The understanding of pictorial space through control of drawing, value and color. Emphasizes topics not covered in Art & Design 210.
2 three-hour studios; 3 semester hours

ART & DESIGN 210
Painting II.
The principles of painting, through a series of visual problems, working from nature. The understanding of pictorial space through control of drawing, value and color. Emphasizes topics not covered in Art & Design 209.
2 three-hour studios; 3 semester hours

ART & DESIGN 215
Graphics Arts Production.
The preparation of artwork for reproduction in printed media. Cost factors including accuracy, planning and scheduling will be explored in all printing process areas with output ranging from advertisements to packaging. A cumulative sequence of projects emphasizing type, color, paper, photography, photomechanical layout, and production processes.
2 three-hour studios; 3 semester hours
Cross-listed with Mass Communication

ART & DESIGN 216
Computer Graphics I.
Layout, typographic and pre-press proofing skills using desktop publishing technologies. The development of two-and three-dimensional designs and drawings using computer shading and modeling. CAD techniques will be compared to traditional design techniques.
2 three-hour studios; 3 semester hours

ART & DESIGN 217
Computer Graphics II.
Advanced techniques in desktop publishing, computer generated drawing and computer-aided drafting. The development of two- and three- dimensional designs and drawings using shading and modeling. Includes advanced topics not introduced in Art & Design 216 such as animation. Prerequisite: completion of Art & Design 216.
2 three-hour studios; 3 semester hours

ART & DESIGN 218
Computer Graphics III.
Advanced techniques in desktop publishing, computer generated drawing and computer-aided drafting. The development of two- and three-dimensional designs and drawings using shading and modeling. Includes advanced topics not introduced in Art & Design 217 such as multimedia. Prerequisite: Art & Design 216.
2 three-hour studios; 3 semester hours

ART & DESIGN 219
Introduction to Computer Applications.
A survey of the primary image processing, layout, and painting software related to desktop publishing, as well as color correction and output.
3 semester hours

ART & DESIGN 221
Ceramics I.
A basic approach to functional and sculptural clay modeling and firing techniques.
2 three-hour studios; 3 semester hours

ART & DESIGN 223
Sculpture I.
Techniques of three dimensional design applied to a variety of materials and used for expressive purposes. Includes figure sculpting and armature construction.
2 three-hour studios; 3 semester hours

ART & DESIGN 230
Video I.
History, theory, and practice of analog/digital capturing and digitizing. Use of cameras and software for digitizing and editing. Emphasis on composition and presentation, with view to preparing students in advanced work and multimedia. Prerequisite: A&D 219.
3 semester hours

ART & DESIGN 231
Photography I.
The use of photography as an art form, illustration and documentation; fundamentals of picture taking and processing; basic camera types, darkroom procedures. Outside assignments and field trips required. Students must furnish their own cameras.
2 three-hour studio and lab periods; 3 semester hours

ART & DESIGN 249
Design Studio I.
Layout, typographic, and prepress proofing skills through use of desktop publishing technologies and procedures. Students will learn to develop printed materials while working within an electronic publishing environment. Projects include brochure and book design. Prerequisite: A&D 203, 219.
3 semester hours

ART & DESIGN 250
Design Studio II.
Primary focus on publishing beyond print and how to design for it. The aim is to give students the foundation necessary to work successfully in a web environment. One aspect of the course involves developing imaging skills, and a typical project will have students create and expand a web site. Prerequisites: A&D 203, 219.
3 semester hours

ART & DESIGN 300
Design Studio III.
Advanced techniques in publishing and presentation. This course is an introduction to interactive/integrated software and animation. It trains students in the technique of integrating sound, movement, and text into an effective presentation. Emphasis on electronic portfolio presentation. Prerequisites: A&D 203, 207, 219.
3 semester hours

ART & DESIGN 301
Design Studio IV.
Continuation of A&D 300 with focus on development and production of a CD ROM. This course stresses team work and the need to bring into play all previous work on the theory and process of multimedia design and implementation.
3 semester hours

ART & DESIGN 309
Painting III.
Investigation of a variety of media and techniques. Problems emphasizing composition formulation. Emphasizes topics not covered in Art & Design 310. Prerequisite: 30 units of Art & Design courses or equivalent. Art & Design 209, 210.
2 three-hour studios; 3 semester hours

ART & DESIGN 310
Painting IV.
Investigation of a variety of media and techniques. Problems emphasizing composition formulation. Emphasizes topics not covered in Art & Design 309. Prerequisite: 30 semester hours of Art & Design courses or equivalent. Art & Design 209, 210.
2 three-hour studios; 3 semester hours

ART & DESIGN 313
Graphic Design I.
Techniques of visual problem-solving as related to professional practice of graphic design. Problems in trademark and symbol design, posters, book jackets, record albums etc. Emphasizes topics not covered in Art & Design 314. Prerequisite: 30 semester hours of Art & Design courses or equivalent. Art & Design 215, 216.
2 three-hour studios; 3 semester hours

ART & DESIGN 314
Graphic Design II.
Techniques of visual problem-solving as related to professional practice of graphic design. Problems in trademark and symbol design, posters, book jackets, record albums etc. Emphasizes topics not covered in Art & Design 313. Prerequisite: 30 semester hours of Art & Design courses or equivalent. Art & Design 215, 216.
2 three-hour studios; 3 semester hours

ART & DESIGN 317
Photography II.
The use of professional studio equipment in/out of studio to fulfill assignments in advertising, fashion, industrial, commercial, and portrait photography by combining creativity and technical knowledge. Emphasis on use of the view camera and studio lighting equipment. Prerequisite: 30 semester hours of Art & Design courses or equivalent. Art & Design 231.
2 three-hour studios; 3 semester hours

ART & DESIGN 319
Printmaking I.
Introduction to printmaking studio practices including intaglio, lithography, relief. Prerequisite: 30 semester hours of Art & Design courses or equivalent.
2 three-hour studios; 3 semester hours

ART & DESIGN 330
Art & Design Seminar.
Includes professional practices and presentations of thesis project work and portfolio approved projects. Prerequisite:

Senior standing.
2 hour seminar discussion; 3 semester hours

ART & DESIGN 352
Graphic Design III.
Environmental graphics, exhibition design, packaging design problems. Primarily two-dimensional graphics in three-dimensional situations. Emphasizes topics not covered in Art & Design 353. Prerequisite: 30 semester hours of Art & Design courses or equivalent; Art & Design 209, 210.
2 three-hour studios; 3 semester hours

ART & DESIGN 353
Graphic Design IV.
Design for the print media. "Swiss grid" layout system and explanatory graphics systems. Total design for books, brochures, magazines, annual reports. Emphasizes topics not covered in Art & Design 352. Prerequisite: 30 semester hours of Art & Design courses or equivalent; Art & Design 209, 210.
2 three-hour studios; 3 semester hours

ART & DESIGN 357
Illustration III.
Advanced illustration problems and techniques for magazines, advertising, fashion, children's books, newspapers and preparation of a professional portfolio. Media used by illustrators including specialized painting and drawing techniques will be studied with emphasis on the importance of style in contemporary illustration. Various markets will be studied to identify appropriate potential markets for student illustrations. Work with editors and art directors. Deadline development and portfolio preparation for

each market type. Emphasizes topics not covered in Art & Design 358. Prerequisite: Art & Design 207, 208.
2 three-hour studios; 3 semester hours

ART & DESIGN 358
Illustration IV.
Advanced illustration problems and techniques for magazines, advertising, fashion, children's books, newspapers and preparation of a professional portfolio. Media used by illustrators including specialized painting and drawing techniques will be studied with emphasis on the importance of style in contemporary illustration. Various markets will be studied to identify appropriate potential markets for student illustrations. Work with editors and art directors. Deadline development and portfolio preparation for each market type. Emphasizes topics not covered in Art & Design 357. Prerequisite: Art & Design 207, 208.
2 three-hour studios; 3 semester hours

ART & DESIGN 375
Nineteenth Century Western Art History.
Major movements in Western art from the French revolution to 1900. Classicism, Romanticism, Realism, Impressionism and Post-Impressionism.
3 periods; 3 semester hours

ART & DESIGN 376
History of Modern Art.
Art of the 20th Century primarily in Europe and North America. Introduces the principal stylistic movements of modernism.
3 periods; 3 semester hours

ART & DESIGN 377
History of Modern Design.
Survey of major design movements of the 19th & 20th Centuries. Studies in the national and international relationship of art and design in such groups as De Stijl and the Bauhaus.
3 periods; 3 semester hours

ART & DESIGN 378
History of Photography.
Survey of photography from its invention to its contemporary uses as artistic expression.
3 periods; 3 semester hours

ART & DESIGN 379
History of the Graphic Arts.
Survey of the history of illustration and graphic design, with emphasis on their global application in communications media.
3 periods; 3 semester hours

ART & DESIGN 380
History of Modern Architecture & Urbanism.
Survey of the major movements in architecture and urban planning from the 19th Century to the present. Considers the problems of vernacular architecture, urban design, historicism, functionalism, post-modernism.
3 periods; 3 semester hours

ART & DESIGN 398
Internship.
Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.
3 semester hours

ART & DESIGN 405
Selected Topics in the History of Art & Design.
Seminar examining specific topics in the global history of art and design such as Asian, pre-Colombian, and African. Prerequisite: 12 semester hours of art history or permission of the instructor.
3 semester hours

ART & DESIGN 408
Selected Topics in Modern Art & Design History.
Seminar examining specific topics in the global history of modern art and design such as Dada, Abstract Expressionism, furniture design, performance art, computer & media arts. Prerequisite: 12 semester hours of art history or permission of the instructor.
3 semester hours

ART & DESIGN 425
Advanced Topics I.
Advanced undergraduate or graduate level topics with directed or independent study formats. Prerequisite: division approval; advanced standing; 30 semester hours of Art & Design courses or equivalent.
By arrangement; 2-10 semester hours.

ART & DESIGN 426
Advanced Topics II.
Advanced undergraduate or graduate level topics with directed or independent study formats. Prerequisite: division approval; advanced standing; 30 semester hours of Art & Design courses or equivalent; and 10 semester hours of 425.
By arrangement; 2-10 semester hours

Industrial Design

INDUSTRIAL DESIGN 107
Product Lab Orientations.
This non credit course is required prior to student use of the lab equipment. It is an introduction to the proper operation of equipment and an understanding of the lab rules. Students will gain a respect for the equipment and an understanding and proper equipment practices. Eye protection and other safety protection will be worn at all times while in the lab.
0 semester hours/cross listed with Int D 107

INDUSTRIAL DESIGN 215
Materials and Manufacturing.
Introduction to ferrous and nonferrous metals and their manufacturing methods, including liquid state, plastic state, and solid state forming; chip and non chip cutting; welding, chemical and mechanical joining; and the finishing process available. Students will develop an individual or group project and complete semester research/project report.
3 semester hours

INDUSTRIAL DESIGN 216
Materials and Manufacturing.
Introduction to thermoset and thermoplastic polymers and elastomers, rubber and other natural engineering materials and their manufacturing methods, including liquid state, plastic state, and solid state forming, chip and non-chip cutting, welding, chemical and mechanical joining, and the finishing processes available. Students will develop an individual or group project and complete a semester research/project report.
3 semester hours

INDUSTRIAL DESIGN 217
Computer Aided Drafting.
In this course students will learn the basics of computer aided drafting. Students will be expected to complete a tutorial and several assigned projects. A semester report including all projects will be completed.
three 1 semester hour modules/cross listed with Int D 217

INDUSTRIAL DESIGN 218A
Beginning CADD.
This course is an introduction to computer aided 3D Modeling. Subjects covered will include Introduction and Interface, drawing 2D shapes, mixing straight lines and arcs, numerical input, generating, viewing and rendering objects, moving rotating, sizing and mirroring objects, and drawing derivative objects. Elementary projects may be assigned, and a semester report may be generated.
2 semester hours / cross listed with Int D 218A

INDUSTRIAL DESIGN 218B
Intermediate CADD.
This is an intermediate class in computer aided 3D modeling. Subjects covered will include terrain models, curved lines and meshes, deformations, boolean, trim and stitch operations, and attaching extending and attaching objects. Intermediate projects will be assigned, and a semester report will be generated.
2 semester hours / cross listed with Int D 218B

INDUSTRIAL DESIGN 218C
Advanced CADD.
This is an advanced class in computer aided 3D modeling. Subjects covered will include reference planes and their palettes; drafting tools, advanced rendering, export features and animation models. Advanced projects will be assigned and a semester report will be generated.
2 semester hours/cross listed with Int D 218C

INDUSTRIAL DESIGN 255
Industrial Design Studio I.
A studio course where elementary product design projects are assigned. Projects will begin with advanced foundation studies, along with simple hand held products, and advance through simple mechanically activated products. Emphasis will be placed on aesthetic development, user requirements, and design for manufactur-ability. A beginning professional portfolio will be initiated. Prerequisite: Foundation courses and Drafting.
3 semester hours

INDUSTRIAL DESIGN 255A
Professional Seminar I.
All students in industrial design will meet in this course to develop their portfolios, learn of full time and part time job opportunities and internships, and to discuss current design issues, often with invited speakers. The student's semester portfolio will be the final output of the course, with professional designers invited for an evening celebration of the semester's work. An internship portfolio and resume will be developed and perfected, leading to a professional senior portfolio. All Industrial Design students are automatically members of the IDSA Student Chapter, and in this class we shall discuss department concerns as well as the activities of the IDSA district and national organizations.
1 semester hour

INDUSTRIAL DESIGN 256
Industrial Design Studio II.
Continuation of Ind D 256
3 semester hours

INDUSTRIAL DESIGN 256A
Professional Seminar II.
Continuation of Ind D 255A
1 semester hour

INDUSTRIAL DESIGN 305
Industrial Design Studio III.
A studio course where complex product design projects are assigned. These projects will begin with simple, electrically powered products, and advance through more sophisticated electromechanical products. Emphasis will be placed on aesthetic development, user requirements, and design for manufacturability. Students will be expected to produce a report for each project and for the semester. A professional portfolio will be further developed. Prerequisite: Ind D 256, Ind D 218A &B, and Ind D 309.
3 semester hours

INDUSTRIAL DESIGN 305A
Professional Seminar III.
Continuation of Ind D 256A.
1 semester hour

INDUSTRIAL DESIGN 306
Industrial Design Studio IV
Continuation of Ind D 305.
3 semester hours

INDUSTRIAL DESIGN 306A
Professional Seminar IV.
Continuation of Ind D 305A.
1 semester hour

INDUSTRIAL DESIGN 309
Human Factors.
Analysis of Human anatomy versus function. Recognition, investigation, exploitation of static/dynamic human movements. Relationships of products, systems and environments to the human scale. Ergonomics and motions that relate to the performance of tasks. Students will develop apparatus to provide significant quantitative data. Variety of advanced studies on dynamic interaction of the body and the environment, products, and systems. Study of the relationship of age, sex, and disabilities to human movements. Creative research projects and the development of mechanical/electric test prototypes to collect quantitative data.
3 semester hours/cross listed with Int D 309

INDUSTRIAL DESIGN 311
Exhibit Design.
A course exploring the fields of display and exhibit design including trade shows, fairs, theme exhibits, mobile exhibits, pavilion and museum design, point of purchase, window and showroom design. The student will be exposed to a variety of project experiences including rendered presentations, model making and construction details. Area included will cover special effects, dioramas, crowd flow management, lighting design, acoustics, graphics, signage, subcontract specifications and portfolio techniques unique to the field. Field trips. Prerequisite: Art & Design 205, 206
3 semester / cross listed with Int D 311

INDUSTRIAL DESIGN 355
Industrial Design Studio V.
A studio course where complex product

system projects are assigned. Projects will include sophisticated electromechanical products. Emphasis will be placed on research, aesthetic development, user requirements, and design for manufacturability. Project reports will be generated which will include detailed analysis, synthesis, material specification, and complete design documentation. A professional portfolio will be completed. When possible, the student is encouraged to work with other professions like engineering and with corporate sponsorship.
Prerequisite: Ind D 306
3 semester hours

INDUSTRIAL DESIGN 355A
Professional Seminar V.
Continuation of Ind D 306A.
1 semester hour

INDUSTRIAL DESIGN 356
Industrial Design Thesis.
A studio course where individual and interdisciplinary group projects of complex product systems are initiated and executed by the student(s). Projects will include sophisticated computer controlled electromechanical products and systems. Emphasis will be placed on research, aesthetic development, user requirements, material specifications, and design for manufacturability. A thesis report will be generated, which will include detailed analysis and synthesis, material specification and complete design documentation, including a set of working drawings and a final model and rendering. A professional portfolio will be completed.
Prerequisite: Ind D 355.
3 semester hours

INDUSTRIAL DESIGN 356A
Professional Seminar VI.
Continuation of Ind D 355A.
1 semester hour

INDUSTRIAL DESIGN 398
Summer Internship I & II.
Summer internship following the Sophomore and Junior years. The student is expected to locate a summer job with the assistance of the ID department. A mutually beneficial job description and expected output will be developed with the participating entity and conveyed to the student. A portfolio of projects is required. Where confidentiality is required, care will be taken to protect the company, yet provide the student with adequate work examples, including a strong emphasis on CAD/CAM. Students will develop a project(s) portfolio and complete an intern project report.
1-6 semester hours each

INDUSTRIAL DESIGN 399
Studio Projects.
This is an advanced studio course for competitions, sponsored projects, and other design projects like furniture and lighting. Students will develop a semester research/project report.
1-9 semester hours

Interior Design

INTERIOR DESIGN 107
Product Lab Orientations.
This non credit course is required prior to student use of the lab equipment. It is an introduction to the proper operation of equipment and an understanding of the lab rules. Students will gain a respect for the equipment and an understanding and proper equipment practices. Eye protection and other safety protection will be worn at all times while in the lab.
0 semester hours / cross listed with Ind D 107

INTERIOR DESIGN 215
Architectural and Energy Systems.
Students study architectural systems, details, and building codes. Construction methods and materials of foundations, walls, partitions, floors, ceilings, and roofs are covered, as well as doors, windows, stairs, and fireplaces. Continued study of building components and energy systems. Plumbing, heating, ventilating, air conditioning, acoustics and solar energy will be examined. Students will be able to represent knowledge of systems and structural details.
3 semester hours

INTERIOR DESIGN 217
Computer Aided Drafting.
In this course students will learn the basics of computer aided drafting. Students will be expected to complete a tutorial and several assigned projects. A semester report including all projects will be completed.
Three 1 semester hour modules/ cross listed with Ind D 217

INTERIOR DESIGN 218A
Beginning CADD.
This course is an introduction to computer aided 3D Modeling. Subjects covered will include Introduction and Interface, drawing 2D shapes, mixing straight lines and arcs, numerical input, generating, viewing and rendering objects, moving rotating, sizing and mirroring objects, and drawing derivative objects. Elementary projects may be assigned, and a semester report may be generated.
2 semester hours / cross listed with Ind D 218A

INTERIOR DESIGN 218B
Intermediate CADD.
This is an intermediate class in computer aided 3D modeling. Subjects covered will include terrain models, curved lines and meshes, deformations, boolean, trim and stitch operations, and attaching extending and attaching objects. Intermediate projects will be assigned, and a semester report will be generated.
2 semester hours / cross listed with Ind D 218B

INTERIOR DESIGN 218C
Advanced CADD.
This is an advanced class in computer aided 3D modeling. Subjects covered will include reference planes and their palettes; drafting tools, advanced rendering, export features and animation models. Advanced projects will be assigned and a semester report will be generated.
2 semester hours / cross listed with Ind D 218C

INTERIOR DESIGN 265
Interior Design 1.
Introductory level course in Interior Design. Application of design theory to commercial and residential interiors. Introduction to human factors, programming, space planning, application of color, form, texture, pattern and aesthetic sensitivity to various interior problems with an emphasis on creativity and innovation. Students will communicate design ideas

with a variety of two and three dimensional presentation techniques.
3 semester hours

INTERIOR DESIGN 266
Interior Design 2.
Exploration of more complicated problems in commercial and residential interiors with continued emphasis on human factors, space planning, creativity and innovation. Application of knowledge of architectural systems to design solutions. Introduction to multi level spaces, atypical users and barrier free design. Design solutions will be presented using a variety of two and three dimensional skills with continued development of media and presentation techniques.
3 semester hours

INTERIOR DESIGN 303
Interior Products and Specifications.
Examination of background finishes and materials from construction and manufacturing processes through measurement and installation methods. Areas covered include floor, wall, and ceiling materials as well as woods, laminates, and glass.
3 semester hours

INTERIOR DESIGN 304
Business Practices and Ethics.
Lecture course on business practices and professional ethics as applied to the Interior Design profession. Survey of business types, marketing and selling of services and products, and fee structures will be discussed. Current trends in safety, codes and licensing issues will be explored. Examination and preparation of business forms including contractual agreements, budget estimates, purchase orders, and invoices will be covered in depth and applied to the thesis project. Prerequisite: Int D 356
3 semester hours

INTERIOR DESIGN 307
Lighting.
An introductory course in Lighting for Interior Spaces. What light is, how it can be produced and how the eye perceives it will be examined. Students will learn basic lighting terminology as well as what equipment is available for commercial and residential use and their appropriate applications. The effect of light to create a mood or atmosphere will be explored. Lighting plans for interior spaces will be generated with an emphasis on technical as well as aesthetic concerns.
3 semester hours

INTERIOR DESIGN 309
Human Factors.
Analysis of Human anatomy versus function. Recognition, investigation, exploitation of static/dynamic human movements. Relationships of products, systems and environments to the human scale. Ergonomics and motions that relate to the performance of tasks. Students will develop apparatus to provide significant quantitative data. Variety of advanced studies on dynamic interaction of the body and the environment, products, and systems. Study of the relationship of age, sex, and disabilities to human movements. Creative research projects and the development of mechanical/electric test prototypes to collect quantitative data.
3 semester hours / cross listed with Ind D 309

INTERIOR DESIGN 311
Exhibit Design.
A course exploring the fields of display and exhibit design including trade shows, fairs, theme exhibits, mobile exhibits, pavilion and museum design, point of purchase, window and showroom design. The student will be exposed to a variety of project experiences including rendered presentations, model making and construction details. Area included will cover special effects, dioramas, crowd flow management, lighting design, acoustics, graphics, signage, subcontract specifications and portfolio techniques unique to the field. Field trips. Prerequisite: Art & Design 205, 206.
3 semester / cross listed with Ind D 311

INTERIOR DESIGN 312
Furniture Design.
Students will have an opportunity to do specialized design work in furniture. Exploration of materials, colors, textures, forms, human factors and manufacturing techniques to create uniquely aesthetic and functional solutions to furniture design problems. Students will be required to do free hand and orthographic drawings as well as a variety of three dimensional models from sketch to final prototype. Prerequisite: Int D 309.
3 semester hours

INTERIOR DESIGN 355
Interior Design 3.
Introduction to more difficult Interior problems in both commercial and residential design. Students will work more advanced programming, space planning, circulation problems and human factors. Continued emphasis on creativity and innovative problem solving. Application of architectural and energy systems as well as safety and building codes to design solution. Sensitivity to atypical users and their needs will be expanded. Architectural and design details, materials and finishes will be incorporated in the final design proposal. Prerequisite: Int D 265, 266.
3 semester hours

INTERIOR DESIGN 356
Interior Design 4.
Continued development of knowledge and skills learned in Interior Design 305 to effectively solve interior design problems in residential and commercial design solutions. Design proposals will be presented Prerequisite: Int D 355.
3 semester hours

INTERIOR DESIGN 365
Interior Design 5 - Thesis.
Students will develop a thesis project in Interior Design which will highlight their ability to solve complicated design problems creatively while being sensitive to human factors, structure and energy systems, programming, circulation, materials and finishes, design details, custom cabinetry and furniture. The design solution will be presented using a variety of advanced two level and three dimensional techniques. Rationale for solution will be validated by research data. Prerequisite: Int D 356.
3 semester hours

INTERIOR DESIGN 366
Interior Design 6.
Course involving extensive work in large office space planning and residential design. Knowledge of interior products and specifications will be incorporated into design solutions. Students will assemble a final portfolio representative of their

design education experiences. Prerequisite: Int D 365.
3 semester hours

INTERIOR DESIGN 362
Construction Documents.
Preparation of Construction Documents for Interiors will be covered in depth and applied to the Thesis project. Drawings to be prepared include construction/demolition, electric/telephone, reflected ceiling, floor finishes, applied finishes, panel and post, and furniture plans as well as detail drawing for special construction, custom cabinetry, furniture and millwork. Prerequisite: Int D 365.
3 semester hours

Biology

BIOLOGY 101
General Biology I.
The course deals with the general biological principles that govern all living organisms. Concepts dealt with include origin of life, structure and function of cells, genetics and evolution.
3 class periods; 1 three-hour laboratory period; 4 semester hours

BIOLOGY 102
General Biology II.
The course examines the diversity of life in terms of their taxonomy, anatomy, physiology and ecology. Emphasis is placed on vertebrate structure and function.
3 class periods; 1 three-hour laboratory; 4 semester hours

BIOLOGY 106
Elementary Microbiology.
Principles of microbiology, including basic morphology, reproduction, environmental effects, sterilization procedures, and immunology. Selected laboratory exercises. Not open to bio majors.
2 class periods; 1 two-hour laboratory period; 3 semester hours

BIOLOGY 113, 114
Anatomy and Physiology I and II.
Anatomy and physiology combined to yield a workable knowledge of the human body. Structure and function taught concurrently, each in terms of the other to engender appreciation of interlocking relationships. Available to biology majors on a restricted basis.
3 class periods; 1 two-hour laboratory period; 8 semester hours

BIOLOGY 200
Biology Cooperative Education Program.
Students who enter the Biology Cooperative Education Program take this course for each semester that they are employed full-time or part-time in paid work assignments. A written report will be required describing significant achievements resulting from his/her work experience. Prerequisite: At least 30 semester hours with a 2.5 QPR and department approval Pass/Fail only.
Credit available through Internship (Biology 300)

BIOLOGY 203
Sexual Man.
A study of human sexuality. Biological and social aspects are considered. Myth, custom and fact.
1 semester hour

BIOLOGY 210
Comparative Anatomy.
An integrated study of vertebrate structure from a phylogenetic approach. Laboratory studies will include dissection of representative forms.Required of all biology majors. Prerequisite: Biology 102.
2 class periods; 2 three-hour laboratories; 4 semester hours

BIOLOGY 211
General Physiology.
Physiological and biochemical control and functioning in systems. Laboratory work designed to acquaint the student with basic physiologic experimentation, and the interpretation and presentation of data. Required of all biology majors. Prerequisite: Biology 101.
3 class periods; 1 three-hour laboratory; 4 semester hours

All biology courses in the 300 and 400 sequence have, unless stipulated otherwise, as prerequisites Biology 101, 102, 211.

BIOLOGY 300
Internship.
Practical application of previous course work during supervised training in commercial, government or private laboratories. Prerequisite: Permission of Chair.
By arrangement; 1-16 semester hours; Pass/Fail only

BIOLOGY 303
Histology.
Detailed analysis of the microscopic structure of animal cells and tissues. Laboratory work limited to study of prepared microscopic material.
2 class periods; 2 three-hour laboratory periods; 4 semester hours

BIOLOGY 307
Genetics.
The laws of biological inheritance and their practical application to life; principles of genetics and evolution derived from historical evidence of both plants and animals. Brief consideration of theories of organic evolution. Prerequisite: A general course in college Biology or Biology 113-114.
3 class periods; 3 semester hours

BIOLOGY 320
Microbiology.
Fundamentals of microbiology. Molds, pathogenic and nonpathogenic bacteria, and viruses; their relationships to man, industry, and agriculture. Laboratory study of cultural, morphological, and physiological properties of representative types. Emphasis on development of technique.
2 class periods; 2 two-hour laboratory periods; and some nonscheduled laboratory work; 4 semester hours

BIOLOGY 321
Cell Physiology.
A lecture course introducing the homeostatic mechanisms of the cell. Chemical composition, metabolism, permeability, synthesis and growth.
3 periods; 3 semester hours

BIOLOGY 323
Ecology.
Relationship of living organisms to their environment; distribution, climatic factors, ecological succession; homeostatis and adaptability of the organism are considered. Field trips designed to emphasize

and illustrate major habitats, life zones, and ecological principles. Prerequisite: Biology 103, 104.
3 class periods; field trips by arrangement; 1 three-hour laboratory; 4 semester hours

BIOLOGY 328
Human Embryology.
A detailed study of human gametes, fertilization, placentation, and fetal development through the 12th week of gestation.
3 class periods; 3 semester hours

BIOLOGY 380-381
Selected Topics.
Modern concepts in the area of the instructor's specialty. To be announced each semester.
1-4 semester hours

BIOLOGY 392
Senior Project in Biology.
A research project in an area not usually covered in the formal course offerings of the Department. Required of all senior biology majors. Students must have the consent of the professor who will be supervising their work before registering for this course.
3 semester hours

BIOLOGY 397H
Independent Study for Honors.
No regular lectures or laboratory periods. Outstanding students do independent work under the guidance of a faculty member. To be eligible for honors study, a student must have the permission of the Department Chair.
2-6 semester hours

BIOLOGY 399L
Directed Research.
Opportunity for the student to pursue laboratory research under the direction of a faculty specialist. Prerequisite: Permission of the instructor and Department Chair.
*1-6 semester hours**

BIOLOGY 399R
Readings.
Individual library studies under faculty direction in an area of student interest. An acceptable paper must be presented. Prerequisite: Permission of the instructor and Department Chair.
*1-3 semester hours**

** A student may take not more than 6 semester hours of total credit in 399*

BIOLOGY 402
Evolution.
A course designed to provide an introduction to modern evolutionary theory and the evidence for evolution as illustrated by living organisms.
3 lectures; 3 semester hours

BIOLOGY 418
Environmental Health.
Introduction by lecture and on-site visits to aspects of the biotic world of man, water, air and noise pollution sewage disposal, food handling.
2 lectures; field trips by arrangement; 3 semester hours

BIOLOGY 423
Microbial Ecology.
The interactions between micro-organisms and their environment will be discussed with emphasis on the bacteria as they occur in natural environments such as the sea, the soil, and within and upon higher organisms. In the laboratory, students will learn the techniques by which microbes in nature are studied. Prerequisite: Permission of the instructor.
2 lectures; 2 two-hour labs; 4 semester hours

BIOLOGY 430
Marine Ecology.
Examination of the ecology of the oceans; relation of distribution to the physical and chemical environments; productivity of the marine communities and the interaction of man with marine communities. Prerequisite: Biology 211 and permission of the instructor.
3 lectures; 1 three-hour lab; 4 semester hours

BIOLOGY 441
Immunology.
Consideration of the basic principles and concepts of the mechanics of immunity and the relation of immunological phenomena to biological problems. Prerequisite: Permission of instructor and Biology 211.
4 lectures; 4 semester hours

BIOLOGY 470
Field Work.
Practical field experience in the collection, identification, and preservation of various animal or plant groups. The actual title to vary with the organisms or area investigated. Prerequisite: Permission of the instructor; field work by arrangement.
1-4 semester hours

BIOLOGY 480
Selected Topics.
Modern courses in diverse areas of faculty specialization within the biological sciences. Prerequisites to vary with the course and instructor; permission of the instructor required.
1-4 semester hours

BIOLOGY 490
Seminar.
A series of intermediate level seminars delivered by specialists and concerned with varying aspects of a selected topic area. Prerequisite: Permission of the moderator.
1-3 semester hours

Business Administration

BUSINESS ADMINISTRATION 200
Co-op Work Experience.
A paid work experience related to the student's major. Faculty approval required.
0-1 semester hours

BUSINESS ADMINISTRATION 382
Internship.
Field study of an organization in action. Students can fulfill the course requirements in one of three ways: a) to do an internship in an outside organization or one of the learning institutes within the College, and submit a paper with an analysis of their experiential learning; b) to write a case study with critical evaluation of an organization in action; or c) to develop a new business venture and submit a comprehensive business plan.

BUSINESS ADMINISTRATION 395
Honors Thesis.
Students are expected to write and present a paper to the faculty which demonstrates

evidence of research in a field of business studies. The paper should contain the following elements: a) the review of literature of business studies in the field; b) description of new trends of thought, practice and application in the field; the writer's own assessment of current research.
3 semester hours

BUSINESS ADMINISTRATION 399
Independent Study
An opportunity to specialize in advanced projects not covered by regular course offerings. Students have individual conferences with assigned faculty members and meet several times as a group to discuss findings and common problems.
1-3 semester hours

Capstone Seminar

CAPSTONE 390
The Capstone theme for the academic year 1996-97 and 1997-98 is "community."

Chemistry

CHEMISTRY 101
Chemistry, Society and You.
This course deals with chemistry and its effect on society with examples dealing with the environment, pollution, the energy crisis and the drug culture. Students examine both the investigative methods of chemistry and its interaction with public policy.
2 lecture periods; 1 discussion or two-hour laboratory period per week; 3 semester hours

CHEMISTRY 103
General Chemistry I.
A study of basic chemical principles and their application. This course is designed for the science and engineering majors and includes theoretical and experimental studies of such topics as composition and structure of matter, stoichiometry, chemical reactions, chemical bonding, gases, atomic and molecular structure, and periodic trends. Prerequisites: 2 years high school mathematics or Mathematics 105.
3 lecture hours; 1 discussion period; 1 three-hour laboratory period; 4 semester hours

CHEMISTRY 104
General Chemistry II.
This course completes the sequence in general chemistry for science and engineering majors. Equilibrium, acids and bases, thermodynamics, nuclear chemistry, introductory organic chemistry. Prerequisites: Chemistry 103, Mathematics 109 or 110 (or 111) or equivalent.
3 lecture hours; 1 discussion period; 1 three-hour laboratory period; 4 semester hours

CHEMISTRY 113
Introductory Chemistry.
An introductory course in chemistry for liberal arts and pre-professional students who wish to broaden their general education or feel that their previous preparation was inadequate. Pre-med and science majors are strongly advised to take Chemistry 103, although credits may be given for the Chemistry 113, 103, and 104 sequence.
3 lecture hours; 1 two-hour laboratory or discussion period per week; 4 semester hours

CHEMISTRY 114
Introduction to Biochemistry.
After a brief review of general chemistry and an introduction to organic chemistry, the chemistry and biochemistry of carbohydrates, fats, proteins, nucleic acids, vitamins, enzymes, and hormones are studied. Included is an introduction to diseases caused by metabolic disturbances and in-born errors of metabolism. Prerequisite: Chemistry 113.
3 lecture periods; 1 two-hour laboratory period per week; 4 semester hours

CHEMISTRY 200
Chem/Co-op.
Students who enter the Chem/Co-op Program take this course each semester they are on a paid work assignment with an employer. All work assignments must be approved by the Chemistry Co-op director. A report is required. Prerequisite: At least sophomore standing.
1 semester hour per work-semester to a maximum of 6 semester hours

CHEMISTRY 202
Principles of Chemical Analysis.
An introduction to the physiochemical behavior of electrolytic solutions, and its application to chemical separations and analyses. Prerequisites: Chemistry 103, 104.
3 lecture hours; 1 three-hour laboratory period; 4 semester hours

CHEMISTRY 205
Organic Chemistry I.
Study of aliphatic and aromatic compounds, synthesis, properties, and reaction mechanisms. Laboratory work in techniques, synthesis, properties and typical reactions. Prerequisites: Chemistry 103, 104.
3 lecture hours; 1 three-hour laboratory period; 4 semester hours

CHEMISTRY 206
Organic Chemistry II.
Study of aliphatic and aromatic componds, synthesis, properties and reaction mechanisms. Laboratory work in techniques, synthesis, properties and typical reactions. Prerequisites: Chemistry 103, 104, 205.
3 lecture hours; 1 three-hour laboratory period; 4 semester hours; every semester 1 three-hour laboratory period; 4 semester hours

CHEMISTRY 319, 320
Physical Chemistry I, II.
Principles of Thermodynamics and structure of matter applied to homogeneous and heterogeneous equilibria, electrochemistry, reaction kinetics. Must be taken with Chemistry 321, 322 unless prior credit has been earned. Prerequisites: Chemistry 202; Mathematics 215; Physics 107, 108. Co-requisite: Chemistry 205.
3 lecture hours; 6 semester hours

CHEMISTRY 321, 322
Physical Chemistry Laboratory I, II.
Laboratory experiments in modern physical chemistry. Must be taken with Chemistry 319, 320 unless prior credit has been earned. Co-requisite: Chemistry 319 for Chemistry 321 and Chemistry 320 for Chemistry 322.
1 four-hour laboratory period; 4 semester hours

CHEMISTRY 351
Instrumental Analysis.
The principles of physical chemistry are

applied to chemical instrumentation, including the operation, capabilities, and limitations of various forms of chemical instrumentation. Spectrometry, spectrophotometry, chromatography, and electrical measurement methods are among the methods considered. Sample preparation and handling, electronics, computer controls, and the advantages and disadvantages of various detectors, sources, optical components, electronic variations are emphasized. Prerequisite: Chemistry 320.
1 lecture hour; 2 three-hour laboratory periods; 3 semester hours; upon student demand

CHEMISTRY 355
Identification of Organic Compounds.
Chemical and instrumental identification or organic compounds and separation of mixtures of compounds. Prerequisite: Chemistry 206.
1 lecture hour; 2 three-hour laboratory periods; 3 semester hours

CHEMISTRY 358
Intermediate Inorganic Chemistry.
Atomic and molecular structure and bonding; chemistry of the less familiar elements; compounds of unusual structure; coordination complexes and stereochemistry. Laboratory work includes special preparations and their assay. Prerequisites: Chemistry 206, 319; Co-requisites: Chemistry 320, 322.
3 lecture hours; 1 three-hour laboratory period; 4 semester hours

CHEMISTRY 365, 366
Biochemistry.
The unifying and quantifying central concepts of biochemistry are studied by applying fundamental physiochemical principles of biological systems. Mechanisms and regulation of major metabolic pathways and structure and function of cellular elements on the molecular scale are covered in detail. Prerequisite: Chemistry 206.
3 lecture hours; 1 three-hour laboratory period; 8 semester hours

CHEMISTRY 370
Organic Synthesis.
Multisteps organic synthesis with emphasis on the structure and mechanism of the reactions involving carbon formation and functional group manipulations. The applications of modern spectroscopy in ascertaining structures of the reaction products with a view on the stereochemistry. Prerequisite: Chemistry 205, 206 or equivalent.
3 lecture hours; 3 semester hours

CHEMISTRY 394, 395
Chemical Research.
Training in creative thinking, design of experiments, use of research literature. Choice of a laboratory research problem. Prerequisites: Chemistry 319, 320, 321, 322 and permission of the instructor.
Semester hours arranged

CHEMISTRY 399
Independent Study.
Opportunity for the student to pursue advanced individual study in his field of interest under the supervision of a specialist. Prerequisite: Permission of the instructor and the Department Chair.
Semester hours (1-6) arranged

Cinema History and Theory

CINEMA HISTORY 181
Introduction to Film Appreciation, Criticism and Analysis.
An introduction to critical analysis and aesthetic appreciation of film, through lectures, discussions, readings, and screenings of dramatic, documentary and experimental films. The course, interdisciplinary in nature, explores various aspects of film style, the similarities and differences between film and other mediums of expression (including painting, music, theatre, and literature), and the various functions of film — as art, entertainment, social statement, propaganda, education, and experiment. Core course in the Fine Arts.
4 periods; 3 semester hours

CINEMA HISTORY 261
Film History I.
A history of film from its beginnings to World War II, with emphasis on the development of forms and techniques, and on the relationships between film and other arts as well as social and political currents. Lectures, discussions, and film showings. Prerequisite: Cinema History 181 or permission of the instructor.
4 periods; 3 semester hours

CINEMA HISTORY 262
Film History II.
A continuation of Cinema History 261. A history of film from World War II to the present. Lectures, discussions, and film showings. Among directors covered: Truffaut, Godard, Hitchcock, Antonioni, Fellini, Kubrick, Bresson, Penn, Bunuel, Altman, Polanski, Fassbinder, Herzog, Wenders, Scorsese, W. Allen, Coppola. Prerequisite: Cinema History 261 or permission of the instructor.
4 periods; 3 semester hours

CINEMA HISTORY 361
American Film.
A survey of major works in the American cinema, emphasizing techniques, styles and the film medium as an index of cultural and social change. Lectures, discussions, and film showings. (The course is repeatable).
4 periods; 3 semester hours

Computer Engineering

COMPUTER ENGINEERING 200
Undergraduate Seminar.
Seminars on engineering topics conducted by visiting speakers, faculty, and students. Attendance is mandatory for second, third, and fourth-year students majoring in Computer Science and Computer Engineering.
1 lecture hour; 0 semester hours

COMPUTER ENGINEERING 210
Digital Design I.
Basic digital design principles. Boolean algebra. Combinational logic design with gates, MSI, LSI. Sequential logic design; register, counters, memory and PLAs. Prerequisite: Mathematical sophistication.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 308
Operating Systems.
Structure and design of computer operating systems. Synchronization of processes; deadlock avoidance; CPU management;

file management; memory management; and device management. Prerequisite: Computer Science 102, Computer Engineering 312.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 312
Computer Organization.
Organization of computer systems. Central processing unit; microprogrammed control; input/output organization; interrupts; traps; direct memory access; arithmetic operations; main memory. Prerequisite: Computer Engineering 210.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 315
Digital Design II with Laboratory.
Design of complex digital systems; top-down design and modularization. Implementation of controllers. Use of hardware design languages (VHDL) to implement systems. Rapid proto typing. Design of a small computer. Fault tolerant design. Prerequisite: Computer Engineering 210. Laboratory includes implementation of digital systems using FPGAs.
3 lecture hours; 4 semester hours;
1 three hour laboratory

COMPUTER ENGINEERING 328
Computer Engineering Practicum.
Indepth project utilizing computer hardware and/or software techniques in its solution. Prerequisite: at least junior standing.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 360
Introduction to Robotics.
Basic Robotics, including: position and velocity sensing, actuators, control theory, robot coordinate systems, robot kinematics, differential motions, path control, dynamics, and force control. Robot sensing, simulation of manipulators, automation, and robot programming languages are also investigated. Prerequisites: CS 102, Math 112, (and preferably Math 215) or permission of instructor.
3 semester hours

COMPUTER ENGINEERING 349
Senior Project.
Major open-ended design project to integrate student's knowledge of hardware and software. Formulation of design specifications, use of design tools, feasibility considerations. Prerequisite: Computer Engineering 308, 386, and senior status.
3 semester hours

COMPUTER ENGINEERING 386
Introduction to Microprocessors.
Theory and application of microprocessors, and associated peripheral devices such as memory, ports, clocks, system design and debugging techniques, including specific design problems using existing devices. Programming aids, including assemblers and simulators. Programming problems including peripheral device service routines and arithmetic operations. Information structures for real-time data acquisition systems. Prerequisite: Computer Engineering 315.
3 lecture hours; 1 three-hour laboratory;
4 semester hours

COMPUTER ENGINEERING 387
Advanced Microprocessors.
Applications of special microprocessors, DRAM refreshing, screen display, memory interface, compressor interface and graphic instructions are studied. Term project uses such devices as graphics processors, DSP processors and the like. Prerequisite: Computer Engineering 386.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 389
Software Engineering.
Modern S/W design methodologies, testing and maintenance of large S/W systems, S/W life cycle, S/W metrics and costing. Term project is required. Prerequisite: Computer Science 102.
3 periods; 3 semester hours

COMPUTER ENGINEERING 410
Introduction to Computer Architecture.
Computer Organization; ALUs; fixed and floating point system; analysis of a complete microcomputer. Prerequisite: Computer Engineering 312.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 440
Image Processing.
This is a project-oriented course. Students will learn and implement FFTs with applications, image enhancement, image restoration, image compression, and image tomography. Projects will be conducted on workstations. Prerequisite: Electrical Engineering 333 and a high level language.
3 lecture hours, 3 semester hours

COMPUTER ENGINEERING 447
Logic Synthesis Using FPGAs.
Logic design using textual design entry, VHDL. Behavioral, structural and data flow descriptions. Technology-dependent vs. technology-independent design. CPLD, SRAM and antifuse technologies. Rapid prototyping and retargeting designs. A major design project. Prerequisites: CpE 210, CpE 315 preferred.
3 lecture hours, 3 semester hours

COMPUTER ENGINEERING 448D
Introduction to VLSI Design.
Design, testing and verification of very large scale integrated circuits. Basic topological structure of ICs. Clocking characteristics. Design methodology and use of software tools. Term project will include the design and testing of a custom integrated circuit. Prerequisites: Computer Engineering 210 and Electrical Engineering 348.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 449
Advanced VLSI Design.
Implementation of custom VLSI designs, digital and analog simulation, fault tolerant design, design for testability. A major project will include the implementation of a digital integrated circuit. Prerequisites: Computer Engineering 48D.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 470
Advanced Robotics.
Advanced robotics and automation topics and techniques, including: active robotic sensing, intelligent and integrated manufacturing systems, robotic inspection, observation under uncertainty, multisensor feedback control of manipulators and mobile robots, advanced simulation and monitoring of robotic systems, high level modeling and control, and other topics. Prerequisites: Introduction to Robotics (Computer Science 360, Computer Engineering 360, Computer Science 460 or Computer Engineering 460), and preferably Computer Science 309, Computer Science 404, or Computer Engineering 404 (AI) or permission of instructor.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 471

Computer Communications I: System Analysis.

Basic elements of system analysis and introduction to communication systems; categories of data transmission systems. Response-time requirements and control of user errors. Different types of modulation and multiplexing. Cost of lines: terrestrial and satellite lines. Network reliability and intelligence in the network. Basic software considerations and developments in data transmission software. Design computations; basic statistics and queueing analysis. Simulation of communication lines. Analysis of imperfections; noise and distortion, line failures, data errors, delays and blocking, treatment of errors. Prerequisite: Computer Science 102; Computer Engineering 210.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 472

Computer Communications II: Networks.

Computer networks and their subsystems. Data communication fundamentals. Sources of network traffic. Packet switching systems and techniques. Simple and adaptive routing in large networks. Flow control and congestion avoidance algorithms. Communication protocols and interfaces. Electronic funds transfer and data security. Data encryption standards and algorithms. One-way functions and their applications. Network optimization problems and algorithms. Synthesis of network topologies. Capacity assignment problems. Hierarchical and mixed-media networks analysis. Prerequisite: Computer Engineering 471 or permission of instructor.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 484

Machine Perception.

An introduction to sensing and machine vision. Vision algorithms that are usable in practical applications, sensing mechanisms and various types of sensed data representation, sense date processing and interpretation for different applications. Prerequisites: Computer Science 400 and Computer Engineering 312.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 485

Computer Vision.

A project-oriented course designed to familiarize the student with the computer image display, processing, with various limitations. The processing includes edge detection, Hough transform, thinning algorithms, moment invariant methods, relaxation algorithms, among others. Prerequisite: Permission of instructor.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 488D

Interactive Computer Graphics.

Introduction to interactive computer graphics in computer-aided design. Current CRT display techniques; programming and graphics display principles; 2-D and 3-D display methods; command and programming languages for graphics. Term project using interactive display device is required. Prerequisite: Computer Engineering 400.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 489

Software Engineering.

Structural development and methodology for large software systems. Planning requirements, design, test and validation. Advanced topics in software development. Prerequisites: Computer Science 400.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 496

Digital Signal Processing Laboratory.

Design and implementation of digital filters, FFT algorithms and adaptive signal processing applications using a current special purpose microprocessor. Term project required. Prerequisite: Electrical Engineering 343 or Electrical Engineering 593; Computer Engineering 386.
3 lecture hours with laboratory; 3 semester hours

COMPUTER ENGINEERING 497

Advanced Problems in Computer Engineering.

Independent study of advanced topics in Computer Engineering and submission of project report as required. Problem assign-ment and semester hours to be arranged with and approved by the Department Chair.
Open only to qualified seniors

Computer Science

COMPUTER SCIENCE 101

Introduction to Computing I.

Introduction to high level languages, data types, subprograms; arrays and records. Top-down programming. Algorithmic development and flow charting.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 102

Introduction to Computing II.

Introduction to data structures. Top-down design and structured programming, debugging. String processing, stacks, queues, lists, linked lists, trees, hash tables. Searching and sorting. Prerequisite: Computer Science 101.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 227

Discrete Structures.

This course is an introduction to some of the discrete mathematical structures relevant to computer science, including set theory, propositional calculus, predicate calculus, algebraic operations and relations, counting techniques, and graph theory. Prerequisite: Math 112.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 301

Programming Languages.

This is a second computer language course organized around the concepts of data objects, data types, abstraction mechanisms, sequence and data control, storage management, syntax, and operating environments. Several widely used programming languages are analyzed to illustrate these concepts. Prerequisite: Computer Science 102.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 306

Compiler Design.

Introduction to compiler design. Major parts of a compiler, lexical, syntactic, and semantic analysis. Introductory language theory. Code optimization techniques. Examples of modern compilers. Prerequisite: Computer Science 102, 227.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 309

Artificial Intelligence (AI) Programming.

Introduction to LISP and Prolog, languages used in AI research. Fundamental AI concepts. Topics covered include; Lisp; symbolic manipulation, data abstraction, object-oriented view, searching, modular programming, and debugging; Prolog: Logic and Problem Solving, non-determinism, data structures, incomplete and uncertain knowledge, querying. Prerequisite: Computer Science 102 and at least junior standing.
3 periods; 3 semester hours

COMPUTER SCIENCE 320

Theory of Computation.

Elements of the theory of formal languages, grammars, finite state machines, compu-tability, primitive recursive functions, Turing machines and computation. Prerequisite: Computer Science 227.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 325

Structure and Interpretation of Computer Programs.

Procedures and data both primitive and compound. Iteraton and recursion. Abstraction of data and procedures. Sequences and trees. Manipulation of lists. Data-directed programming, dispatch on type, message passing. Object-oriented programming. Local state and environment diagrams. Streams. Prerequisite: Computer Science 101.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 329

Fundamentals of Algorithms.

This course aims to develop an understanding of the process by which an algorithm is developed to solve a problem and how it is translated into a working computer program. Emphasis is placed on problem-solving approaches and efficient programming techniques. Topics covered are: data structures, stacks, lists, trees, search algorithms, introduction to parsing and sorting techniques; structures programming; interactive and recursive programming, analysis of algorithms and special purpose algorithms. Prerequisite: Computer Science 102, 227.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 340

Queueing Theory.

Important probability distributions, Markov chains, Poisson process, birth-and-death process, queuing theory, queuing models of computer systems. Prerequisite: Computer Science 320, Mathematics 323.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 341

Linear Programming.

Linear programming formulation of optimization problems, hyperplanes, convex sets, linear independence, bases of vector spaces, matrix inversion, theory and computation techniques of simplex, revised simplex methods, degeneracy, duality. Transportation and assignment problems, integer programming and network flows. Prerequisite: Math 214, Computer Science 227.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 349

Senior Project.

Student will initiate and complete a project that meets career interests and objectives. One or more faculty will be available to each student in a consulting capacity. The department chair must approve an outline of the project in the semester prior to registration for this course.
3 semester hours

COMPUTER SCIENCE 360

Introduction to Robotics.

Basic Robotics including: position and velocity sensing, actuators, control theory, robot coordinate systems, robot kinematics, differential motions, path control, dynamics, and force control. Robot sensing, simulation of manipulators, automation, and robot programming languages are also investigated. Prerequisites: Computer Science 102, Math 112, (and preferably Math 215) or permission of instructor.
3 semester hours

Dental Hygiene

DENTAL HYGIENE 123

Oral Anatomy and Embryology.

This course is an introduction to the study of the oral cavity and its associated structures. Included in the curriculum are lectures covering anatomy, embryology and histology of oral structures and the head and neck, emphasizing teeth and their supporting tissues. Emphasis is placed on clinical application.
4 lecture hours; 4 semester hours

DENTAL HYGIENE 124

Dental Radiology.

This course provides the fundamental scientific principles upon which clinical dental radiology is based. Content includes application to radiation safety for patient and operator, quality assurance, infection control practice standards, intra oral radiographic techniques, quality film production and film evaluation. Prerequisite: Successful completion of DH 123 and DH 129.
2 lecture hours; two-hour laboratory period; 3 semester hours

DENTAL HYGIENE 129

Clinical Practice I.

Introduction to the role and function of the Dental Hygienist in preventive dentistry; history and ethics of the Dental Hygiene profession; relationship of general and oral health to the disease process. Clinical hours are devoted to development of: infection control procedures, oral self care, basic clinical skills of patient assessment/data collection, patient education and dental emergencies.
2 lecture hours; 7 clinical hours; 3 semester hours

DENTAL HYGIENE 130

Clinical Practice II.

This course is a continuation of Clinical Practice I and focuses on the role of the Dental Hygienist as a preventive oral health specialist. Clinical time is devoted to patient treatment, fluoride therapy, treatment planning, emergency response protocols and continuing development of clinical skills to facilitate total patient care. Prerequisite: Successful completion of Dental Hygiene 129 and DH 123.
2 lecture hours; 8 clinical hours; 4 semester hours

DENTAL HYGIENE 199

Clinic Practice Independent Study.

This course provides additional clinical experience in the Fones Dental Health Clinic for students to continue development

of clinical skills for total patient care.
1-5 semester hours

DENTAL HYGIENE 223
Pharmacology for the Dental Hygienist.
General principles of pharmacology and use of pharmaceuticals; derivation and effect of drugs, especially those used in dentistry. Values and uses of chemical sterilizing agents, pre-and post-operative medications, anesthetics, antibiotics, and other pharmaceutical adjuncts to oral hygiene and dental care. Prerequisite: Successful completion of Chemistry 114.
2 lecture hours; 2 semester hours

DENTAL HYGIENE 227
Clinical Practice III.
The course provides advanced didactic and clinical experience in Fones Dental Health Center as well as various community settings. Students deliver Dental Hygiene services to patients with a variety of special needs. Prerequisite: Successful completion of all first-year required courses.
2 lecture hours, 14-21 clinical hours per week; 5 semester hours.

DENTAL HYGIENE 228
Clinical Practice IV.
Continuation of advanced didactic and clinical practices of Dental Hygiene 227. This course will assist the student in refining clinical skills and will introduce the student to a study of professional ethics and dental jurisprudence, professional organizations, issues facing the profession, and state dental practice acts. Prerequisite: Successful completion of Dental Hygiene 227, Dental Hygiene 223, Dental Hygiene 233, Dental Hygiene 241.
2 lecture hours, 14-21 clinical hours per week; 5 semester hours.

DENTAL HYGIENE 232
Dental Public Health.
Dental Public Health consists of didactic and field work components in community services. It is designed to enable Dental Hygiene students to identify Dental Hygiene career opportunities within the public health setting; describe the structure and function of public health; explain federal, state and local legislation, policies and procedures pertaining to public health; assess the dental needs and demands of the public including special populations; and plan and evaluate dental health care programming. Prerequisite: Successful completion of all first year required courses.
2 lecture hours; 72 hours of field experience per rotation; 4 semester hours

DENTAL HYGIENE 233
Oral and General Histo-Pathology.
This course will provide the dental hygienist with an in-depth discussion of various types of oral diseases of the hard and soft tissues. Emphasis will be placed on the etiology, clinical picture, radiographic picture, histologic/microscopic findings, pathogenesis, treatment and prognosis for each condition discussed. Some systemic conditions with specific oral findings will also be covered. Prerequisite: Successful completion of all first year required courses.
3 lecture hours; 3 semester hours

DENTAL HYGIENE 241
Periodontology.
This course expands on the basic principles of periodontology introduced during the first year Dental Hygiene curriculum. Students receive a sound foundation in the biological aspects including the classification and microbiology of the periodontal diseases, the role of the immune system in the disease process and the various periodontal treatment modalities available with emphasis on the Dental Hygiene treatment plan. Prerequisite: Successful completion of all first year required courses.
2 lecture hours; 2 semester hours

DENTAL HYGIENE 250
Dental Materials.
This course provides didactic and clinical information relating to dental materials utilized in the dental office. Content includes: terminology, basic principles, properties of materials, techniques and procedures, recognition of restorations and indications for their use. Students will also gain exposure to expanded auxiliary utilization, and the role of the Dental Hygienist in specialty practice. Prerequisite: Successful completion of all required first year Dental Hygiene courses, Dental Hygiene 227.
2 lecture hours; 1 two-hour laboratory period; 3 semester hours

DENTAL HYGIENE 299
Dental Hygiene Independent Study.
Selected independent projects conducted under the supervision of a Dental Hygiene faculty member.
1-6 semester hours

DENTAL HYGIENE 301
Dental Hygiene Practice Management.
This course assists dental hygienists to develop advanced dental hygiene practice management skills. Topics relating to practice characteristics, practice models, personnel, financial management, insurance and other reimbursement mechanisms, and practice building strategies will be included.
3 lecture hours; 3 semester hours

DENTAL HYGIENE 302
Instructional Strategies for the Health Professional.
Assessment, planning, implementation and evaluation of various instructional methodologies/strategies to facilitate presentations. Fundamentals of instructional theory with practical skill applications.
2 lecture hours; two-hour observation/ presentation; 3 semester hours

DENTAL HYGIENE 303
Oral Medicine.
This course provides an understanding of the oral and systemic manifestations of disease. Emphasis is placed on the medical history, patient interview and pharmacologic agents used in the treatment of diseases. A case study format is utilized to assist students to integrate the knowledge and skills gained in other Dental Hygiene courses and apply this information to specific patient needs. Prerequisites: Dental Hygiene 123, 124, 129, 130.
3 lecture hours; 3 semester hours

DENTAL HYGIENE 304
Dental Hygiene Internship.
Direct observation and supervised teaching or field work. Interns complete this practicum in selected sites implementing the skills acquired in Dental Hygiene 302, and other Associate and Baccalaureate courses. Prerequisite: Dental Hygiene 302.
By arrangement; 3-6 semester hours

DENTAL HYGIENE 305
Dental Hygiene Research.
This course will introduce the student to

the fundamentals of research design and process. This course will enable Dental Hygiene students to develop skills in the analysis of dental research findings and the evaluation of dental products via the critical analysis of manufacturers' claims. Students will also gain exposure to the development of research protocols. Prerequisites: Completion of first year clinical curriculum.
3 lecture hours; 3 semester hours

DENTAL HYGIENE 306
Contemporary Dental Hygiene Practice.
This course is designed to familiarize Dental Hygiene students with evolving professional trends related to private or public practice. Students, working in groups of three or four, will utilize and reinforce acquired Dental Hygiene research concepts while developing advanced assessment, planning implementation and evaluation skills. Required of all candidates for a Bachelor of Science degree in Dental Hygiene. Prerequisite: Dental Hygiene 302, DH 305 and senior status.
4 semester hours

Economics

ECONOMICS 201
Principles of Economics I — Macro.
Analysis of basic concepts; national income, employment, monetary and fiscal policy and economic growth.
3 semester hours

ECONOMICS 202
Principles of Economics II — Micro.
An analysis of price, output, income distribution, market structures and international trade.
3 semester hours

ECONOMICS 301
Money, Banking, and Capital Markets.
Basic banking principles. The pattern of our present system of financial institutions. Prerequisites: Economics 201 and 202; junior or senior status.
3 semester hours

ECONOMICS 306
Government and Business.
An analysis of the effect of market structure on price formation and business policies. The role of antitrust laws and federal regulation on business conduct. Prerequisites: Economics 201 and 202; junior or senior status.
3 semester hours

ECONOMICS 310
Income Theory.
Theoretical analysis of the determinants of the level of national income, interest rates and the price level. Both the Keynesian and neoclassical contributions are considered. Prerequisites: Economics 201 and 202; junior or senior status.
3 semester hours

ECONOMICS 311
Price Theory.
The theoretical analysis of the behavior of the consumer and the firm. Problems of income distribution, welfare economics, and general equilibrium analysis. Prerequisites: Economics 201 and 202; junior or senior status.
3 semester hours

ECONOMICS 315
Manpower Economics.
A seminar in manpower demand and supply. An examination of job opportunities, training and education for employment, discrimination in the labor market, union economics, and the socio-political implications of employment. Special attention to management problems *vis-a-vis* the labor force. Prerequisites: Economics 201 and 202; junior or senior status.
3 semester hours

ECONOMICS 330
Economic Development.
The development of the Third World countries with emphasis on the economic principles that explain and provide a basis for policy. Prerequisites: Economics 201 and 202; junior or senior status.
3 semester hours

ECONOMICS 371
Alternative Economic Systems.
This course surveys and analyzes various economic systems characterizing the world. It treats theoretical models, allocative mechanisms and roles of government in mixed socialist and centrally planned economies. Prerequisite: Economics 201 and 202; junior or senior status.
3 semester hours

ECONOMICS 375
Multinational Economics.
Emphasis on the theoretical and policy aspects of international trade with analysis of specialization and trade, balance of payments, tariff utilization and adjustment mechanism and policies involved in trade in the world economy. Prerequisites: Economics 201 and 202; junior or senior status.
3 semester hours

ECONOMICS 395
Problems in Business Economics.
The study of economic principles that explain and provide a basis for policy. Prerequisites: Economics 201 and 202; junior or senior status.
3 semester hours

ECONOMICS 398
Monetary and Fiscal Policy.
Seminar on monetary and fiscal policy. Prerequisites: Economics 201 and 202 and 310; Open only to seniors.
3 semester hours

Education

EDUCATION 296
Micro Computers and Their Utilization.
This is a variable credit course covering, in modularized format, computer literacy, programming, software evaluation, database management, word processing, applications such as spreadsheet capability, and statistical analysis. Lab fee required.
1-3 credits

EDUCATION 304
History and Philosophy of Education.
This is a critical study of conflicting philosophies of education viewed from historical perspectives and compared with current practices. It aims to create understanding of several points of view, their historical development, and their implications for contemporary education.
3 semester hours

EDUCATION 314

Educational Psychology.

This course concentrates on the application to the teaching-learning process of psychological concepts, principles, theory and research results. It examines issues of growth and development, adjustment and personality, learning and measurement and evaluation. This meets teacher requirements for psychological foundations.
3 semester hours

EDUCATION 336C

Literature for Young People.

This course highlights books and periodicals that are appropriate for school children. It emphasizes criteria for selection and evaluation, procedures for establishing a program in the classroom through drama, storytelling, book reporting, and illustrations.
3 semester hours

EDUCATION 337

Teaching the Special Needs Students.

This course is designed to provide educators with the understanding of the development of exceptional students and the methods of identifying, diagnosing, and prescribing the activities for teaching such students in regular classrooms. This course in special education satisfies the state's requirement for Certification and includes the major categories of exceptionality e.g., the learning disabled, the handicapped, the gifted, etc.
3 semester hours

EDUCATION 343/344

Elementary Methods I, II

These courses are designed to develop basic competency for teaching in an elementary classroom. Class activities, teaching strategies and planning will be introduced. Implementation of major approaches such as interdisciplinary teaching and whole language will be demonstrated in terms of language arts, math, social studies and science. Students will engage in micro teaching. Frequent reference will be made to observations in classrooms.

Special emphasis in Education 343 will be made on language arts and social studies. Special emphasis in Education 344 will be made on math and science.
3 semester hours

EDUCATION 399

Independent Study in Education.

This is an opportunity to do independent and individualized study of topics not a part of the regular program offerings or to a degree beyond normal requirements. Students confer with assigned faculty supervisor and may meet in seminar with other independent study participants.
399C - Elementary Education
399J - Secondary Education
Permission of Department Chair is required
1-6 semester hours

EDUCATION 444

Methods and Materials, Reading

This course focuses on the developmental learning approach. It examines such methods as whole word, phonetic, and linguistic instruction and practice with classroom diagnosis, stressing interrelationship of work perception, phonics, and comprehension. There is an examination of and practice with selected materials in common use.
3 semester hours

EDUCATION 450

Field Experience.

This course is a structured observation in a public school. The goals of the course are to facilitate the students' awareness of self, of school pupils, and of prospective teachers. Course can serve as an elective for other majors. The number of credits taken should be determined with the student's advisor. Required prior to student teaching.
1-6 semester hours

Electrical Engineering

Design-oriented courses are designated with a "D".

ELECTRICAL ENGINEERING 233

Network Analysis I.

Elementary two-terminal component characteristics. Circuit laws and their application to the analysis of circuits with linear com-ponents. Steady state AC analysis. Computer simulation (SPICE). Prerequisite: Mathematics 112.
3 semester hours

ELECTRICAL ENGINEERING 235

Network Analysis I Lab.

Use of resistor networks and DC voltage sources in various configurations; measurements of current flow and voltage difference. Introduction to RLC circuits in steady AC conditions. Familiarization with standard laboratory instruments.
1 three-hour laboratory, 1 semester hour

ELECTRICAL ENGINEERING 234

Network Analysis II.

Time-domain analysis of systems with energy-storage components. Transients. Singularity functions. Magnetic coupling. Fourier Series. Introduction to real and complex frequency analysis. Computer simulation (SPICE). Prerequisite: Electrical Engineering 223.
3 semester hours

ELECTRICAL ENGINEERING 236

Network Analysis II Lab.

Steady state and transient analysis of RLC circuits. Typical series and parallel resonance circuits are examined and their parameters experimentally determined; two pole networks analysis; transformers; frequency response plots. Extensive use of the oscilloscope.
1 three-hour laboratory; 1 semester hour

ELECTRICAL ENGINEERING 315D

Fiber Optics.

Communication via light waves over fiber optic cables. Analysis of light emission and light detection. Absorption loss. Optical devices, connectors, splices and Local Area Networks (LANs). Prerequisite: Physics 220 or equivalent.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 317

Introduction to Control Systems.

Analysis of steady state and transient response of control systems. Laplace transform methods. Transfer functions. Stability criteria. Nyquist, Bode, and root-locus methods. System stabilization. System design. Prerequisite: Electrical Engineering 234,236; Math 301.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 333

Signals and Systems.

Application of Fourier series, Fourier integral and Laplace transform methods to dynamic systems. Introduction to discrete

time systems. Prerequisite: Electrical Engineering 224. Co-requisite: Math 301.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 336
Digital Design Laboratory.
Design and implementation of digital system. Diagnostic techniques. Board design. Prerequisite: Computer Engineering 210.
1 three-hour laboratory; 2 semester hours

ELECTRICAL ENGINEERING 337
Electronic Design Laboratory I.
Application of the operational amplifier, the diode, the field effect and bipolar transistor in electronic circuits, amplifiers, voltage regu- lators, rectifiers, etc. Prerequisites: ElectricalEngineering 234, 236; Electrical Engineering 348.
1 three-hour laboratory; 2 semester hours

ELECTRICAL ENGINEERING 338
Electronic Design Laboratory II.
Analysis and design of electronic circuitry; tuned RF amplifiers, oscillators, power amplifiers, active RC filters. System considerations. Prerequisite: Electrical Engineering 337; Electrical Engineering 382.
1 three-hour laboratory; 2 semester hours

ELECTRICAL ENGINEERING 341
Field Theory.
Force, field and energy of electrostatic and moving charges. Magnetic fields and their effect on materials: Inductance, Maxwell's equations in plane wave propagation. Prerequisite: Math 301, Physics 220.
3 lecture hours; 1 discussion hour; 3 semester hours

ELECTRICAL ENGINEERING 344D
Power Electronics.
Application of power diodes and power transistors in rectifier arrangements and voltage regulators. Properties and application in power converters, inverters and motor drives. Prerequisite: Electrical Engineering 382.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 348
Electronic Circuits I.
Application of diodes, bipolar transistors (BJT) and field effect transistors (FET) to signal amplification and switching. Introduction to OPAMPS and power amplifiers. Computer Simulation (SPICE). Prerequisite: Electrical Engineering 234, 236.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 349
Senior Project.
The student is given the task to design an electronic assembly of moderate complexity, the design to conform to a specification begins with a theoretical analysis, followed by a comparative analysis of candidate configurations, and a determination and trade-off of parameters. A laboratory model of the entire or part of the design project is constructed, tested and a final report is written and presented orally. Prerequisites: Electrical Engineering 338; Electrical Engineering 382.
1 three-hour laboratory; 3 semester hours

ELECTRICAL ENGINEERING 350
Communication Systems Laboratory.
Hands-on experience with digital and analog communication equipment; AM, FM and digital modulation techniques. Design and test of optimal configurations. Measurement of performance parameters in the presence of thermal noise. Prerequisite: Electrical Engineering 370.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 355
Power Electronics Laboratory.
The application of power semi-conductors to the processing and control of electric power. Analysis and Design principles for AC/DC converters, inverters, switching regulators, motor drives. Prerequisite: Electrical Engineering 344D.
3 laboratory hours; 3 semester hours

ELECTRICAL ENGINEERING 370
Communication Systems.
Spectral analysis; modulation and demodulation system analysis, including AM, FM, pulse modulation and transmission of digital information. Signal design and system considerations. Prerequisite: Electrical Engineering 333.
3 lecture hours;3 semester hours

ELECTRICAL ENGINEERING 372D
Telecommunication System Design.
Thermal noise: statistics, properties and representation. Effect of thermal noise on system parameters. Signal degradation effects in digital and analog transmission. Link design: parameter estimation and trade offs. Prerequisite: Electrical Engineering 370.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 382
Electronic Circuits II.
Frequency response of amplifiers. Detailed study of operational amplifier circuit design. Feedback in electronic circuits. Design of filters and oscillators. Prerequisites: Electrical Engineering 234, 236; Electrical Engineering 348.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 383D
Digital Integrated Circuits.
Extensive use of SPICE computer language to simulate applications to digital logic. Ebers-Moll model of the BJT; application to ECL and TTL logic. Application of FET to CMOS logic. Switching speed, noise margin and fan-in/fan-out power requirements. Prerequisite: Electrical Engineering 382.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 388D
Linear Integrated Circuits.
Introduction to monolithic circuit technology: differential amplifiers, active loads, transistor current sources; large scale linear systems, limitations and performance criteria. Prerequisite: Electrical Engineering 382.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 394
Filters.
Analog Filters: Butterworth, Bessel, Chebychev, other. S-plane mapping. Laplace transform analysis. Discrete filters: difference equations, z-transform analysis, FIR and IIR filters, least square fitting, discrete Fourier transform. Prerequisite: Electrical Engineering 333.
3 lecture hours;3 semester hours

ELECTRICAL ENGINEERING 397
Advanced Problems In Electrical Engineering.
Independent study of advanced topics in Electrical Engineering. Problem assignment and credits to be arranged with and approved by the Department.

The following graduate courses are available to academically qualified undergraduate students. Electrical Engineering department permission is required. For

course details, see the graduate section in the Catalog.

Electrical Engineering 436D, Network Synthesis

Electrical Engineering 437, Microwaves

Electrical Engineering 440, Random Processes

Electrical Engineering 443, Applied Digital Signal Processing

Electrical Engineering 448D, Introduction to VLSI Design

Electrical Engineering 455, Microwave Laboratory

Electrical Engineering 496D, Digital Signal Processing Laboratory

Engineering

ENGINEERING 111

Introduction to Engineering I.

This course introduces the student to the engineering design process on a beginning level. Emphasis is placed on the structure of the design process involving problem definition, development of alternatives, analysis, decision making and iteration. One guided design project and one independent project are completed by student project teams. Concurrent lectures and homework assignments develop skills in data management, mechanics, chemistry, electrical theory, energy and economics. Personal computer usage is emphasized for mathematical calculations and the preparation of engineering reports. Prerequisite: Math 109.

3 lecture hours, 3 semester hours, 1 design semester hour

ENGINEERING 112

Introduction to Engineering II.

A continuation of Engineering 111: Introduction to computer-aided drafting. Fundamental principles of computer-aided graphical representation appropriate to the students' area of concentration. A design project is completed by student project teams and an engineering report is generated which includes a set of engineering drawings. Prerequisite: Engineering 111.

3 lecture hours, 2 semester hours, 1/2 design credit hour

ENGINEERING 223

Materials Science for Engineers.

A study of the properties of materials of importance to engineers. Structure-property-processing relationships. Mechanical, physical and electrical properties of metals, ceramics and polymers. Prerequisite: Chemistry 103.

3 lecture hours, 3 semester hours

ENGINEERING 300

Economics and Management of Engineering Projects.

The design process, engineering economics, project planning and ethics in engineering practice. A required course for all engineering majors, normally taken in the junior year, offered both semesters. Prerequisite: Junior standing.

1 lecture hour, 1 recitation hour, 1 semester hour credit

ENGINEERING 373

Engineering Systems Design

A required course for all senior engineering students graduating in 1996 and beyond. Students undertake an inter-disciplinary team project in engineering. The project requires students to plan and execute a project from definition to completion. Teams are composed of engineering students from all disciplines. Emphasis is placed on effective oral and written communications. Normally offered Fall semester and before the Senior Project Design in major or concentration. Prerequisite: Senior standing.

3 semester hours, 3 design semester hours

English

Unless specifically stated in the course description, the only prerequisite for any undergraduate English department course is the fulfillment of the freshman composition requirement.

Composition

ENGLISH 100

Basic Composition.

Techniques of composition, including sentence structure, paragraph development, organization of the whole theme, with regular written assignments. Additional emphasis on fundamentals to assist students with weak backgrounds. A passing grade admits the students to English C101. Students who have a grade of A or B at the end of the semester may take the essay final for English C101. If they score an A or B on that examination, they may waive English C101.

3 semester hours

ENGLISH C101

Composition and Rhetoric I.

An introduction to the elements of effective writing, concentrating on structure, logic, specificity, focus, grammar, sentence structure, and mechanics. Frequent writing in and out of class. By the end of the semester, students should be able to compose and organize a grammatically correct and adequately developed expository essay.

3 semester hours

ENGLISH 100 I

Developmental English.

For those who need academic preparation before studying in English, this course provides focused, individualized work on special problems in using English fundamentals, oral/aural problems, reading and oral comprehension, English patterning and structures, leading to the production of short written works. Graded on Pass/Fail basis.

3 semester hours

ENGLISH 101 I

Composition and Rhetoric I.

The content of 101 I parallels that of 101, emphasizing work in coherence and rhetoric, in critical thinking, in developing ideas, and in techniques of revision, to produce mature and idiomatically adequate writing. Prerequisite: English 100 I or passing diagnostic tests.

3 semester hours

ENGLISH 102

The Analytical Research Essay.

Emphasis on the writing of the formal analytical essay and the essential methods of research common to various academic disciplines. Close readings of a broad range of literature. By the end of the semester, students should demonstrate a mastery of the formal essay and the research paper. Recommended for students who need an

extra course in writing. Prerequisite: A passing grade in English 100 or C101.
3 semester hours

ENGLISH 115
Methods of Inquiry.
This course is designed to help students become active participants in their own education and thereby to help them succeed in college. The course will address: questioning skills, critical thinking strategies and the use of every university resource in completing course assignments. Active listening, note taking, and test taking strategies are rehearsed, while units dealing with stress management, attitude and decision making skills aim to provide opportunities to increase the individual's emotional stability.
3 semester hours

ENGLISH 200
English Cooperative Education Program.
An opportunity for English majors to work off-campus and put into practice those skills acquired within departmental programs. The co-op course requires a written report to be evaluated by the School Director. In addition, the department will require an evaluation from the employer.
By arrangement with the Chair
1-6 semester hours

ENGLISH 202
Advanced Exposition.
Essay writing, with a stylistic approach and a concern for accuracy in presenting or explaining ideas in an orderly, logical manner. Emphasis on improved clarity and effectiveness, through careful revision in written reports and assigned papers, especially those pertaining to the student's major field. Prerequisite: Completion, with passing grades, of English 100 or C101 and English 102, or English 103.
3 semester hours

ENGLISH 274
Copy Editing I.
Course operates on lecture-workshop basis, stressing both skill in standard English and preparation in basic copy editing procedures, and involving correcting, clarifying, and polishing the prose of other writers for specific audiences.
3 semester hours

CREATIVE WRITING

ENGLISH 201
Creative Writing.
Extensive writing in shortfiction. Progression from simple narrative, basic character description, dialogue and scene writing to vignette, short-short and short story. Marketing advice. Specific emphasis varies with instructor. Designed for the undergraduate who writes well but needs practice, direction, motivation.
3 semester hours

ENGLISH 205
Poetry Writing.
For students with a demonstrated basic ability in the writing of poetry. Introduction to the techniques of poetry, covering such elements as meter, rhyme, image patterns, stanza forms, lyric, dramatic, narrative modes, blank verse, and free verse. Some history of poetic movements. Study of contemporary poetry. Work in the course is mainly writing and discussing of student poems.
3 semester hours

ENGLISH 308
Advanced Creative Writing.
Seminar-workshop: Considerable attention to the creative desires of individual students. Student may choose to write poetry, short stories, sections of novels, drama. Emphasis on completed manuscripts, potential publication, individual explorations of form and content. Prerequisite: English 201 or the consent of the instructor, which is given only upon presentation of an acceptable piece of creative writing done by the student.
3 semester hours

ENGLISH 309
Seminar in Creative Writing.
(A continuation of English 308 — Advanced Creative Writing.) Reading, discussion, analysis of student manuscripts, marketing. Emphasis on extended projects: professional essays, novels, collections of short stories or poetry, full-length plays. Prerequisite: English 308 or permission of the Director of Creative Writing.
3 semester hours

ENGLISH 380, 381
Individual Studies in Writing.
Students work on an extended writing project, preferably book-length, meeting regularly with their writing advisor. Prerequisite: English 309; or English 308 and permission of the Director of Creative Writing; by arrangement.
3 semester hours

LANGUAGE AND LITERATURE

ENGLISH 180
Science Fiction.
Study of the science fiction and speculative fiction genre, covering such aspects as the history of science fiction; treatment of character, plot, heroes, style, theme; science fiction as a vehicle for predicting the future; impact on society; role of science and space flight; ecological and mystical concerns. Authors read and discussed range from Hawthorne and Poe, Wells and Verne to such as Asimov, Heinlein, Bradbury, Delany, Brunner, Clark, Vonnegut, Silverberg.
3 semester hours

ENGLISH 197
Masterpieces of English Literature.
Designed primarily for other than English majors. An attempt to get some feeling for and pleasure from the development and continuity of English literature. Readings and discussions of selected major works by the major authors including Chaucer, Shakespeare, Milton, Swift, Blake, Wordsworth, Dickens, Tennyson and Lawrence. Open to all students, including freshmen. May be taken concurrently with English 100, 101, 102, or 103.
3 semester hours

ENGLISH 198
Masterpieces of American Literature.
Designed primarily for other than English majors. The course will focus on individual masterpieces of American fiction, poetry and drama. Open to all students including freshmen. Recommended for international students.
3 semester hours

ENGLISH 207
American Literature I.
A systematic survey of the major literary movements and their cultural contexts from the writings of the first settlers to the establishment of a uniquely American literature in the mid-nineteenth century.
3 semester hours

ENGLISH 208
American Literature II.
A survey of the literature of transition from an era of traditional and idealized values to one of realist and relativist perceptions, covering the period from the Civil War to World War II.
3 semester hours

ENGLISH 209
British Literature I.
A survey of British literature from the beginnings to the eighteenth century.
3 semester hours

ENGLISH 210
British Literature II.
A survey of British literature from the eighteenth century to World War I.
3 semester hours

ENGLISH 212
Masterpieces of World Literature.
An introduction to some of the basic texts reflecting the West's Judeo-Christian, Classical, and Medieval heritage, ending with one or two masterpieces from the Renaissance. Selections from the Old and New Testaments, Homer, Greek tragedy and comedy, Plato, Virgil, Dante, and Cervantes.
3 semester hours

ENGLISH 213
Contemporary Drama.
Dramatic works by British and American authors as well as works in translation primarily since World War II. Emphasis will be upon how to read a play, the difference between technical appeal and meaning, and similar fundamentals for reading drama for maximum understanding. A specific reading list will be available when the course is scheduled, but the work of playwrights such as Williams, Albee, Pinter, Behan, Ionesco, Handke, Beckett and Brecht will typically be included.
3 semester hours

ENGLISH 215
Thematic Studies in Literature.
Introductory studies of literature in relation to major areas of concern in contemporary life. Courses will vary from semester to semester. Topics included are Folklore & Folklife, The Literature of Cruelty, Childhood in Literature, and Confession and Autobiography.
3 semester hours

ENGLISH 223
Modern Afro-American Literature.
Study of the fiction, drama, poetry, and essays of such significant black writers as Richard Wright, James Baldwin, Ralph Ellison, Lorraine Hansberry, Arna Bontemps, and Malcolm X.
3 semester hours

ENGLISH 233
The Roots of Modern Culture.
Topics and themes important to the understanding of the origin and development of modern Western society and culture. Subjects such as industrialism, the growth of the city, class conflict, the emergence of new values and expectations, the importance of war, and the role of minorities are explored in a variety of literary and historical texts.
(Cross-listed as History 233)
3 semester hours

ENGLISH 252
Women in Literature.
The course examines the stereotypes, myths and realities involved in the way women are viewed by male and female authors. Authors include D.H. Lawrence, Ibsen, Kate Chopin, Virginia Woolf, Edith Wharton.
3 semester hours

ENGLISH 305
Shakespeare.
Selected examples of the comedies, tragedies, and history plays. The principal emphasis is on drama, but some consideration is given to the Renaissance political, religious, and social backgrounds of the plays.
3 semester hours

ENGLISH 325
Contemporary Poetry
Lectures and discussion concerning such movements as Modernism, Imagism, and Feminism in 20th century poetry. Can involve examination of non-Western poetry. Topics vary from year to year as the English faculty may direct.
3 semester hours

ENGLISH 330
Studies in 19th Century American Literature.
A variable content course covering both the close study of individual authors (Hawthorne, Melville, Poe, Twain, Emerson) and of the major literary movements of the century (Romanticism, Naturalism, Realism).
3 semester hours

ENGLISH 332
Studies in 20th Century American Literature.
A variable content course covering such major novelists and poets as Fitzgerald, Hemingway, Faulkner, Dos Passos, Wright, Eliot, Frost, and Stevens, as well as contemporary fiction and poetry.
3 semester hours

ENGLISH 352
Studies in Early American Literature.
Variable content. Intensive study of themes, genres, authors, and factions prominent in American literature before 1830. Typical of the areas of study are: The Spirit of '76, early fiction and poetry, Jonathan Edwards and Benjamin Franklin, the Puritans.
3 semester hours

ENGLISH 357
Studies in the Novel.
A variable content course covering major figures and movements in the development of the novel from the 18th Century to the present. The authors studied are primarily, but not exclusively, North American and British.
3 semester hours

ENGLISH 360
Milton and the 17th Century.
The major poetry and prose of John Milton with varying emphasis in different years. Milton's writings are studied in the contexts of the Reformation, the Renaissance, English Puritanism, and more specifically literary contexts such as that of Metaphysical verse. Students are encouraged to explore other aspects of Milton's work through independent research papers.
3 semester hours

ENGLISH 361

Satire and the 18th Century.

Reading and analysis of major works of English Neo-Classical satire as well as a few examples of their 20th Century descendents. The core works to be read will include Jonathan Swift's *"Tale of a Tub"* and *Gulliver's Travels,* Alexander Pope's *Rape of the Lock* and selected satires and epistles, John Gay's *The Beggar's Opera,* and Henry Fielding's *Joseph Andrews.* The works are related to various theories of satire.
3 semester hours

ENGLISH 362

Studies in 19th Century English Literature.

A variable content course examining the major formal and thematic concerns of 19th Century novelists and poets such as Austen, the Brontes, Dickens, Eliot, Hardy, Keats, Shelley, and Wordsworth.
3 semester hours

ENGLISH 395

Topics in Literature.

Taught in seminar fashion, this course concentrates on one or two major writers or a general theme. Topics in recent years have been Jane Austen, Charles Dickens, Yeats, the novel in transition. The Spirit of '76: Literature of Early American Republic; Literature and Psychology; the Quest; Literature of Revolt.
3 semester hours

ENGLISH 398

Internship

Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.
3 semester hours

ENGLISH 399

Independent Studies.

For the student who wishes to specialize in advanced projects not covered by the regular course offerings. Individual or small group conferences with designated advisor. Prerequisite: Permission of School Director.
1-6 semester hours

Fashion Merchandising

(SEE RETAILING)

FASHION MERCHANDISING 101

Fashion Fundamentals.

The course includes an overview of the fashion industry, including the marketing of fashion. A study of the history of retailing, fashion terminology, and electronic technology. Influential designers are included. Students must participate in field trips.
3 periods; 3 semester hours

FASHION MERCHANDISING 104

History of Costume.

An introduction to the development of clothing and period dress. Includes clothing designs and fabrications from Mesopotamia, Greek, Roman, Byzantine, the 12th, 13th, 14th, 15th and 16th Century, Renaissance, 17th Century Baroque, 18th, 19th Century through modern dress.
3 periods; 3 semester hours

FASHION MERCHANDISING 107

Furniture and Home Furnishings.

Interrelationship of furniture and architectural from ancient to modern times. Study of important European and American furniture designs, their related accessories, fabrics and colors.Includes a study of china, glassware, flatware, and silver.
3 periods; 3 semester hours

FASHION MERCHANDISING 108

Product Knowledge–Fashion Accessories.

In-depth studies of fashion accessories and non-woven consumer products designed to give students a realistic appreciation of quality choices in merchandise selection, in performance standards, and consumer care. Specifically, the course emphasizes raw materials: leather, plastic, rubber, fur, precious metals, precious and semi-precious stones and products: shoes, handbags, luggage, gloves, furs, fine jewelry, cosmetics, and fashion accessories. Course requires that students research and prepare portfolios of fashion accessories from historic and current fashion periods. Students design and create some accessory items for the current marketplace.
3 periods; 3 semester hours

FASHION MERCHANDISING OR RETAILING 200

Full Semester Co-op Experience.

A paid co-op with faculty approved, fashion or retail affiliated organization offered to selected Fashion Merchandising and Retail Bachelor's or Associate's degree candidates. Applications should be submitted during the freshman fall semester or the spring semester for transfer students. Acceptance into the program and maintenance of a minimum 2.5 QPR for Bachelor's degree and 3.0 QPR for Associate degree students. Faculty approved Fashion Merchandising and Retailing majors only.
1 semester hour

FASHION MERCHANDISING 270

Fashion Show.

A practical study of the techniques for Fashion Show production. The ultimate result is a fashion show presentation showing current styles from the New York and local fashion markets. Course includes planning, budgeting, organizing, writing commentaries, promoting, choosing fashions, staging and reviewing for the final show.
1 period; 1 semester hour

FASHION MERCHANDISING OR RETAILING 299

Independent Study in Fashion Merchandising or Retailing Techniques.

Prerequisite: Permission of the Director.
1-3 semester hours

Finance

FINANCE 309

Financial Management.

Fundamental tools of analysis for the finan-cial management of the firm. Sources and uses of funds analysis for capital budgeting and working capital management. Prerequisites: Economics 201 and 202, Management Science 120; junior or senior status.
3 semester hours

FINANCE 321

Investment Principles.

Provides the student with the tools necessary for evaluating investments, including stocks, bonds, options and commodities. Additionally, it presents a systematic

methodology for constructing efficient portfolios and evaluating portfolio performance. Prerequisite: Finance 309; junior or senior status.
3 semester hours

FINANCE 345
Bank Management.
Financial management concepts and techniques for the managerial problems of depository institutions. Includes traditional bank management concerns and those resulting from the changing economic environment. Prerequisites: Economics 301; Finance 309; junior or senior status.
3 semester hours

FINANCE 365
Financial Theory.
General survey of financial theories, from the viewpoint of both the financial officer or manager and creditor or stockholder. Prerequisites: Finance 309 and 321; junior or senior status.
3 semester hours

FINANCE 380
Multinational Finance.
The course concerns the international dimensions of corporate finance. The goal of the course is to equip students with the tools to deal with some of the major environmental and decision-making problems relating to corporate overseas finance and investments. Prerequisites: Finance 309; junior or senior status.
3 semester hours

French

FRENCH 101
Elementary French I.
This course is for students who have little or no knowledge of French. Emphasis on listening, speaking, reading and writing skills. Instruction based on in-class use of videocassettes and regular laboratory attendance.
3 semester hours

FRENCH 102
Elementary French II.
Continuation of French 101. Further development of listening, speaking, reading and writing skills. Introduction to contemporary French customs through use of videocassettes and reading of selected passages of literature. Emphasis on basic structural linguistics. Laboratory attendance essential. Prerequisite: French 101.
3 semester hours

FRENCH 103
Intermediate French I.
Provides a systematic review of grammatical structures. Dictées. Introduction to various short literary texts by Francophone authors. Use of videocassette program and attendance at laboratory as needed. Prerequisite: French 102, or four years of high school French.
3 semester hours

FRENCH 104
Intermediate French II.
This course is conducted entirely in French, with emphasis on reading, writing, and oral presentations by students. Study of texts by Gide, Proust, Claudel, Romains, Pragnol, Saint-Exupéry, Sartre, Camus, Senghor, Césaire, and others, including selections from the Surrealists and authors of the nouveau roman.
3 semester hours

FRENCH 275
Topics in French & Francophone Literature.
Reading of representative works drawn from French and Francophone (West African & Caribbean) literature and discussion of trends and idioms among speakers of French. This course may be given in French or in a mixture of French and English, according to student needs. Prerequisite: French 104, if given in French.
3 semester hours

FRENCH 398
Internship.
Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.
3 semester hours

FRENCH 399
Individual Study.
Special projects on topics not studied in detail in regular courses, or projects on topics included in regular courses when those courses are not available. Prerequisite: Permission required of School Director.
1-6 semester hours

Geology

GEOLOGY 105
Introduction to Geology.
Concepts of physical geology presented with a view to inceasing awareness and appreciation of man's natural geological environment. Topics include: plate tectonics, volcanos, earthquakes, glaciers, groundwater, rocks, minerals, fossils; field trips. Requires no background in the physical sciences.
2 lecture periods; 1 two-hour laboratory; 3 semester hours

GEOLOGY 205
Environmental Geology.
The application of geology to problems arising out of the interaction of man and the planet. Topics include natural resources and conservation, geothermal energy; geological hazards such as earthquakes, volcanos, floods, mass movement and subsidence; and geology and regional planning; field trips. Recommended: a course in laboratory science
2 lecture periods; 1 two-hour laboratory period; 3 semester hours

German

GERMAN 101
Elementary German I.
First part of a two semester course designed to develop basic language skills: speaking, listening, reading, and writing. Students may expect to acquire (i) the ability to speak and understand simple German, (ii) an understanding of the grammar, and (iii) the capacity to read non-technical texts. Individual language laboratory work; films and video presentations.
3 semester hours

GERMAN 102
Elementary German II.
Second part of a two semester course

designed to develop basic language skills. Aims and procedures similar to those for German 101.
3 semester hours

GERMAN 103
Intermediate German I.
This course follows German 102. It provides a thorough grammar review accompanied by readings in contemporary literary and non-literary texts. Introduction to German culture and recent history by use of videos, etc. Students will work regularly with video and audio materials.
3 semester hours

GERMAN 104
Intermediate German II.
This course involves regular practice in speaking and writing German. Based on a wide variety of reading materials and films with a focus on Germany in the period from the Third Reich to today.
3 semester hours

GERMAN 398
Internship.
Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.
3 semester hours

GERMAN 399
Independent Study.
Special projects on topics not studied in detail in regular courses, or on topics included in regular courses when those courses are not available. Prerequisite: Permission of advisor and School Director.
1-6 semester hours

Gerontology

GERONTOLOGY 101
Introduction to Gerontology.
An interdisciplinary overview of the implications of aging in American society. This course is designed to acquaint the student who is contemplating a career in gerontology, with the physical, psychological, social, economic and cultural dimensions of the total experience of growing older.
3 semester hours

GERONTOLOGY 150
Health Problems of Older Persons.
This course provides an introduction to the variety of health problems faced by many older persons. Each bodily system is reviewed and the effects of both normal aging and age-related disease processes upon each bodily system are examined. The impact of different health problems upon the ability of older persons to adapt to the challenges of later life is an underlying theme throughout the course. It also introduces the student to therapeutic strategies for dealing with selected health problems of older persons. Prerequisites: Gerontology 101 or Biology 113-114.
3 semester hours

GERONTOLOGY 276
Mental Health Work with the Aged.
This course provides an overview of the key ingredients necessary for a successful old age, with an emphasis on mental health needs of older persons. Common emotional problems facing older persons are considered. Both functional and organic brain disorders, the major mental disorders of late life are also discussed. The course will review a variety of treatment principles and skills supportive of positive mental health among the elderly. Prerequisites: Gerontology 101 or Mental Health 101.
3 semester hours

GERONTOLOGY 301
Special Topics.
Special areas and problems in gerontology designed to meet specific needs of gerontology students and practitioners in the field.
1-3 semester hours

GERONTOLOGY 331
Process of Living and Dying.
A seminar based on the premise that death and dying are closely related to life and living. This course explores the processes of death and dying, its effect on family members, cultural attitudes toward death, and various professional and paraprofessional roles available to deal with these issues.
3 semester hours

GERONTOLOGY 351
Social Gerontology.
This course deals with societal aspects of aging and focuses upon socio-cultural factors that contribute to patterns of aging in the USA. Topics covered include the cultural meaning of aging; the socialization process of aging; the population dimension of aging; human ecology of the aged; social stratification among the aged; deviance and crime among the aged; social power of the aged; and social change and the aged. Prerequisites: Gerontology 101 or Sociology 101.
3 semester hours

GERONTOLOGY 389
Seminar in Critical Issues in Contemporary Gerontology.
This course is interdisciplinary in its orientation and its purpose is to familiarize students with the rich diversity of professional literature contributing to the field of gerontology. In addition, it is designed to demonstrate the linkages between theoretical issues and practical concerns in the field of aging. The course will draw upon the knowledge and experience of a variety of scientists and practitioners who will lead discussions on selected issues to be identified by the seminar's participants. Prerequisites: Gerontology 101 and 12 additional semester hours of gerontology course work.
3 semester hours

GERONTOLOGY 399
Independent Study.
Requires permission of Chair and instructor. This course is open only to Gerontology majors with at least twelve semester hours in gerontology. Students wishing to take this course must submit a detailed description of study.
1-6 semester hours

History

HISTORY 100
Major Figures in World History.
This course is offered in three one-semester hour sections, each section dealing with one person of historical significance, and lasting 12 class periods. Students may register for one or more sections. Usually the three persons are related chronologically or thematically, as in the case of

Hitler, Mussolini and Stalin, or Washington, Jefferson and Adams, or Florence Nightingale, Emmeline Pankhurst, and Emma Goldman.
1 semester hour

HISTORY 101
World Civilization I to the 17th Century.
The first semester of a historical survey of world cultures. The development of social, political, economic, and religious institutions and the major trends of philosophy, science, literature, and art. A Core Heritage course.
3 semester hours

HISTORY 102
World Civilization II — 17th Century to the Present.
The second semester of a historical survey of major world cultures. Because of the nature of the period studied, additional emphasis on political, economic and social developments and on the role of science and technology.
3 semester hours

HISTORY 200
History Co-Operative Education Program.
Provides history majors an opportunity to work in local historical collections, museums, libraries, governmental offices, and other relevant places, where the skills of historical research and writing are used. Co-op requires consultation and reports between student, employer, and School Director.
0-2 semester hours

HISTORY 207
American History to 1877.
European background to discovery and exploration. The English colonies; struggle for North America; the Revolution; constitutional development; growth of democracy; westward expansion; sectionalism; Civil War and Reconstruction. Major political, social, economic, and cultural trends in American society through Reconstruction.
3 semester hours

HISTORY 208
American History Since 1877.
Gilded Age; industrial development; big business; expansion; imperialism; the U.S. as a world power; wars and foreign affairs; constitutional trends; political developments, economic and social trends and problems; cultural trends.
3 semester hours

HISTORY 222
The Ancient Greeks.
From pre-Mycenaean times to the Hellenistic period, ending in 146 B.C. Emphasis on institutions, everyday life, ideas, and culture.
3 semester hours

HISTORY 223
Ancient Rome.
From earliest Roman society to the time of Constantine. Emphasis on institutions of the Roman Republic and Empire and their impact on Western Civilization.
3 semester hours

HISTORY 228
Foundations of Modern England.
Examination of social, economic, political and cultural resources and events from the English Renaissance under Henry VIII (1509) to the colonial wars under George III (1783). Special focus on the Reformation, Civil War, Cromwell and the Glorious Revolution (1688); early development of colonies and imperial bases; life-styles and culture of rural and early industrial society.
3 semester hours

HISTORY 233
Roots of Modern Culture.
Topics and themes important to the understanding of the origin and development of modern Western society and culture. Subjects such as industrialism, the growth of the city, class conflict, the emergence of new values and expectations, the importance of war, and the role of minorities are explored in a variety of literary and historical texts.
(Cross-listed as English 233)
3 semester hours

HISTORY 250
Introduction to the Third World.
General review of the principal countries of the Third World, their history, philosophical outlook and culture, and the political implications of their status in between the major powers of the East and West. Particular emphasis on social, economic, and political changes under and after colonialism.
3 semester hours

HISTORY 299
Independent Study in History.
Designed for the student who wishes to develop a survey project not covered by the listed course offerings. Individual or group conferences with designated faculty advisor. Prerequisite: Permission of School Director
1-6 semester hours

HISTORY 301
North America in Colonial and Revolutionary Times.
Study of the methods of European expansion; Indian, African and European contact in the 17th Century; political development of the British colonies; events leading to the revolutionary acts of 1763-1789; the period of the Confederation and social conditions in a revolutionary context.
3 semester hours

HISTORY 303
The Seedtime of the Republic: American Politics and Society, 1789-1815.
The establishment of the U.S. government and economy; U.S. state relations; the rise of political parties; Federalist and Republican social thought and ideology; the War of 1812 and the development of American nationalism.
3 semester hours

HISTORY 304
Civil War and Reconstruction.
Causes of the war; sectionalism, slavery, the territories, economic, social and intellectual factors; secession and war; major military campaigns; constitutional developments; presidential and congressional reconstruction; disputed election of 1876.
3 semester hours

HISTORY 313
American Social History from Colonial Times to the Civil War.
Lifestyles and reciprocal attitudes of Indians, Puritans, Blacks, Sectarians, women and immigrants elucidated through a study of original materials including diaries, art, music and literature.
3 semester hours

HISTORY 315
History of American Immigration.
Close study of the immigration experience

from the 17th to the 20th Centuries. Emphasis on social, cultural and economic impact of immigrants on America, and of America upon them, especially with regard to the reaction of Native Americans.
3 semester hours

HISTORY 319
Diplomatic History of the United States.
Foreign relations of the United States from the Treaty of Paris of 1783 to the end of the Cold War. Treaty-making, involvement in international law and organizations, intercontinental economic and military arrangements.
3 semester hours

HISTORY 326
Europe Since 1918.
Treaty of Versailles; Lenin and Wilson; German Revolution; Weimar and European culture; Communism; Fascism; National Socialism; Third Republic and fall of France; origins of the World War II; European resistance movements; wartime diplomacy; political collapse of Europe; postwar Europe and the world. The instructor may focus on a particular nation and its relationship to European events during this time period.
3 semester hours

HISTORY 336
Portrait of an Age.
Comprehensive study of life and manners of a particular historical period, with emphasis on original sources such as diaries, memoirs, official records, literature, art and music. Periods could include the antebellum South, the Gilded Age, Victorian Society in England or the United States, France in the time of Louis XIV, and so on. May be repeated for credit if topics vary.
3 semester hours

HISTORY 392
Historiography.
Required of history majors and usually taken in the senior year. The study of individual historians and the assumptions about men, society, and events which governed their writing. Section A deals with American historians from the colonial period to today. Section B does the same for European historians, starting with classical times and moving on through the Middle Ages, Renaissance, 18th, 19th, and 20th centuries. Prerequisite: 6 hours of advanced history courses.
3 semester hours

HISTORY 398
Internship.
Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.
3 semester hours

HISTORY 399
Independent Study in History.
For the student who desires to specialize in advanced projects not covered by the regular course offerings. Individual or group conferences with designated faculty advisor. Prerequisite: Permission of School Director.
1-6 semester hours

HISTORY 441
Topics in American History.
Examination in depth of topics ranging from the development of slavery, the foundation of the Republic, the War of 1812, Indian-European relations, the rise of industry, the Civil War, diplomacy, the New Deal, the impact of World War II on American life, and so on. Topic varies by semester. Course may be retaken for credit. Prerequisite: 6 hours of American History.
3 semester hours

Humanities - Literature and Civilization

HUMANITIES C201
Introduction to the Humanities I.
An interdisciplinary course which employs history, literature and philosophy to examine and explain the cultures and values of a civilization over time and place. Works studied include primary historical and philosophical texts, as well as literary and artistic creations. Currently, the course looks at the civilization of the United States, focusing on the "American Dream," its origins, growth and significance.
This is a Core Heritage Course.
3 semester hours

HUMANITIES C202
Introduction to the Humanities II.
An interdisciplinary course which examines the culture and values of a specific society at a given time. Works studied include primary historical and philosophical texts as well as literary and artistic creations. Currently, the course looks at elements of the American experience in the 20th century, including the changing roles of race and gender, impact of war, appearance of new ideas and values, and similar topics.
This is a Core Heritage Course.
3 semester hours

HUMANITIES 206
Sophomore Seminar.
An interdisciplinary and thematic seminar, in which two or more cultures are studied from the perspectives of history, literature, philosophy and art. Required by Literature and Civilization majors in sophomore year. Prerequisites: Humanities C201/C202 or six semester hours from any two of the humanities.
3 semester hours

HUMANITIES 395A & 395B
Thesis I & II.
A two semester sequence, starting in the junior and finishing in the senior year, in which the student works closely with the academic advisor on a mutually acceptable project involving serious research.
6 semester hours

Human Services

HUMAN SERVICES 110
Alcohol and Other Drugs in Society.
This course explores alcohol and other drug use and abuse in society. Included in the course will be a historic review, the role of culture in use of drugs, the effect on society, the family and the individual, and an overview of the etiology, assessment and treatment of dependence.
3 semester hours

HUMAN SERVICES 201
Principles of Psychotherapeutic Relationships for Mental Health Workers.
Concepts of individual helping relationships

are discussed especially from a communications viewpoint. Interviewing skills are further developed with an emphasis on the role of the mental health practitioner.
3 semester hours

HUMAN SERVICES 203
Introduction to Human Services.
This course is an introduction to human services with a focus on the United States. A his- torical background of human services will be provided as well as a background in community organization and theory. A contemporary theoretical approach to human services will be provided through the use of studies.
3 semester hours

HUMAN SERVICES 277
Practicum in Human Services.
The Human Service major enrolled in the practicum receives individually arranged on-site placement in human service agencies. This arrangement is intended to provide students the opportunity to experientially investigate the specific area of interest that they have developed and/ or to allow for the individualization necessary to meet the student's specific skill area needs. The student is expected to be enrolled concurrently in theoretical course work which complements the student's on-site learning experiences.
1-6 semester hours

HUMAN SERVICES 299
Special Topics.
Investigation of current topics in the mental health field, identifying problems, paradoxes and parameters in areas of mental health and illness. Analysis, design and implementation of solutions will be identified and discussed.
1 - 6 semester hours

HUMAN SERVICES 301
Crisis Management.
Students are exposed to models of crisis intervention that facilitate crisis resolution. Crisis theory, critical factors, developmental and situational crisis as well as intervention with unique populations and special issues are discussed. Course includes competency-based skill-building exercises.
3 semester hours

HUMAN SERVICES 303
Counseling Methods for Specialized Populations.
Students are presented with several counseling approaches useful in effecting change with specialized populations such as learning disabled, emotionally disturbed, institutionalized youth, alcoholics, drug offenders, aged and others.
3 semester hours

HUMAN SERVICES 305
Strategies and Techniques of Group Interaction.
Students become aware of strategies and techniques of group interaction as they relate to behavioral outcomes. Different theoretical models will be offered and opportunities will be given to demonstrate the effectiveness of specific approaches to unique populations.
3 semester hours

HUMAN SERVICES 309
Strategies for Effective Parenting.
Students will be presented with several models useful in training parents to be more effective. Modules such as Adlerian Family Counseling, Parent Effectiveness Training, Behavioral Approaches and Transactional Analysis will be included. Emphasis will be on skill building as well as theory.
3 semester hours

HUMAN SERVICES 312
Internship in Human Services.
The internship differs from the practicum in that it emphasizes the organizational aspects of the placement, i.e. management, planning, research, etc.
1 - 6 semester hours

HUMAN SERVICES 315
Substance Abuse and Chemical Dependency.
This course concentrates on assessment and diagnosis of substance abuse and chemical dependency as well as the different treatment modalities and methods used to help the addicted. Included in the course will be a look at the different addictions and compulsive behavior patterns including alcohol and other drug dependency, gambling, and eating disorders.
3 semester hours

HUMAN SERVICES 316
The Dysfunctional Family.
This course explores family dysfunction with emphasis on causes, effects and roles played within the family systems. Also covered are methods of intervention and treatment and support for the family as well as individuals within the family. Special emphasis is placed on the families with chemical dependency.
3 semester hours

HUMAN SERVICES 332A
Counseling Strategies for Career Decision- Making.
Students will be presented with strategies and techniques for career decision-making as they relate to different issues and populations such as re-entry, mid-life, aging, youth and adult offenders, addiction (drug and alcohol), and cultural issues. Establishing career management strategies and the utilization of community resources in career planning will also be explored.
1-6 semester hours

HUMAN SERVICES 333
Social Policy and Administration.
This course introduces the student to the various components of social policy; formation, implementation, administration, and evaluation. Theoretical issues as well as historical factors in policy are presented. Practical problems in administration of non-profit agencies are presented and analyzed.
3 semester hours

HUMAN SERVICES 350
Seminars in Counseling and Human Services.
Investigation of current issues in the human services field to identify problems, paradoxes, and parameters of service delivery. One-semester hour modules are available in such areas as human service models, target populations, systems analysis, community dynamics, politics, legislation, public policy. Each module includes projects or experience designed to increase the human service worker's effectiveness on the job.
3 semester hours

HUMAN SERVICES 399
Independent Study.
1 - 6 semester hours

International Business

INTERNATIONAL BUSINESS 302
Multicultural Management.
This course introduces students to the basics of organization and management theory, as they apply to the global market place. A cross-cultural approach is used to examine the similarities, differences and application of theory across national boundaries; and to identify those structural constants that permit business to be conducted on a global scale. Organization culture, role structure, coordination and control methods, leadership, and business strategy are the basic theoretical constructs introduced and evaluated in the course. Prerequisite: junior or senior status.
3 semester hours

INTERNATIONAL BUSINESS 325
Import/Export.
This course surveys functions and responsibilities of international traffic personnel; terms of trade; U.S. and foreign rules and regulations; documentation; methods of payment; ocean transportation; price quotations; analysis of transportation and marine insurance. Prerequisites: Economics 201, 202; junior or senior status.
3 semester hours

INTERNATIONAL BUSINESS 327
Multinational Accounting.
A global perspective of accounting practices. Development and role of accounting in selected countries, comparative practices in financial reporting and disclosure, setting international accounting standards, and examinations of auditing and taxation issues. Prerequisite: Accounting 101.
3 semester hours

INTERNATIONAL BUSINESS 330
Economic Growth and Development.
A study of the problems, theories, and policies of economic growth and development, as they may be applied to the developing nations. Prerequisites: Economics 201, 202; junior or senior status.
3 semester hours

INTERNATIONAL BUSINESS 342
Multinational Marketing.
Lecture and case studies, exploring cultural, political, economic and legal aspects of the development and operation of companies marketing overseas. Planning, organizing, controlling and promoting international marketing programs for industrial and consumer goods. Prerequisite: junior or senior status.
3 semester hours

INTERNATIONAL BUSINESS 371
Alternative Economic Systems.
Analysis and evaluation of the ways in which various economic systems arrange their production, distribution, and exchange; their comparative efficiency in resource allocation. Prerequisites: Economics 201, 202; junior or senior status.
3 semester hours

INTERNATIONAL BUSINESS 375
Multinational Economics.
Emphasis on the theoretical and policy aspects of international trade with analysis of specialization and trade, balance of payments, tariff utilization and adjustment mechanism and policies involved in trade in the world economy. Prerequisites: Economics 201 and 202; junior or senior status.
3 semester hours

INTERNATIONAL BUSINESS 380
Multinational Finance.
The course concerns the international dimensions of corporate finance. The goal of the course is to equip students with the tools to deal with some of the major environmental and decision-making problems relating to corporate overseas finance and investments. Prerequisites: Finance 309; junior or senior status.
3 semester hours

Japanese

JAPANESE 101
Elementary Japanese I.
Introduction to the Japanese language, stressing speaking, listening, reading and writing. The course will feature the Japanese writing system, and introduce the student to the language's phonetic/phonemic structure gradually, with additional stress on pronounciation, aural comprehension and basic conversation.
3 semester hours

JAPANESE 102
Elementary Japanese II.
Continuation of Japanese 101. Prerequisite: Japanese 101
3 semester hours

JAPANESE 103
Intermediate Japanese I.
Conversation based on the reading of current prose texts. Thorough review of grammar and vocabulary, and continued drill in writing. Introduction to Japanese culture and recent history through use of film, videos, and newspapers. Prerequisite: Japanese 102.
3 semester hours

JAPANESE 104
Intermediate Japanese 104.
Continuation of Japanese 103, with special focus on reading and writing with style and fluency. Prerequisite: Japanese 103.
3 semester hours

JAPANESE 398
Internship.
Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.
3 semester hours

JAPANESE 399
Independent Study.
Special projects on topics not studied in detail in regular courses, or on topics included in regular courses when those course are not available. Prerequisite: Permission of advisor and School Director.
1-6 semester hours

Korean

KOREAN 101
Elementary Korean I.
Introduction to the Korean language, stressing speaking, listening, reading and writing. The course will start with the Korean writing system, its phonetic/phonemic system, and its structure, continue with an examination of what makes Korean unique to other languages, and then proceed with a step by step study of

grammar, vocabulary, writing and conversation.
3 semester hours

KOREAN 102
Elementary Korean II.
Continuation of Korean 101. Prerequisite: Korean 101
3 semester hours

KOREAN 103
Intermediate Korean I.
Conversation based on the reading of modern prose texts. Drill in written and oral expression. Prerequisite: Korean 102
3 semester hours

KOREAN 104
Intermediate Korean II.
Continuation of Korean 103. Prerequisite: Korean 103
3 semester hours

KOREAN 398
Internship
Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.
3 semester hours

KOREAN 399
Independent Study.
Special projects on topics not studied in depth in regular courses, or on topics included in regular courses when those courses are not available. Prerequisite: Permission of advisor and School Director.
1-6 semester hours

Law

LAW 251
Business Law I.
Court systems, sources of law in the United States, the constitutional basis of the legal system, government power to regulate business, the types and powers of administrative agencies, civil dispute resolution and alternatives to civil litigation; the law of contracts, fairness and good faith in interpretation of contracts, and the United Nations Convention on Contracts for the International Sale of Goods; problems in Agency and Employment, the ethical implications of business decisions, the broad functions of criminal and tort law, the Foreign Corrupt Practices Act, and the constitutional limitations on criminal procedure.
3 semester hours

LAW 252
Business Law II.
A continuation of Law 251. Negotiable instruments, real and personal property, security transactions, sales, partnerships, and corporations.
3 semester hours

Legal Assistant Studies

LEGAL ASSISTANT STUDIES 101
Criminal Law.
A survey of general principles of criminal law, defenses, court procedures and jurisdiction. Emphasis is placed on the practical application of this knowledge for the paralegal.
2 semester hours

LEGAL ASSISTANT STUDIES 102
Legal Research.
An introduction to the study of law which acquaints the student with analysis and synthesis of cases and other legal materials. The student is taught to use various methods of legal research, which include indexes, digests, Shepard's Citations, encyclopedias, the West key number system, Lexis and Westlaw. Each student is required to submit written abstracts and memoranda on problems involving questions of substantive law, procedure and legal ethics.
3 semester hours

LEGAL ASSISTANT STUDIES 103
Contracts and Uniform Commercial Code.
A general survey of contract law, definitions and classifications of contracts; capacity of parties; legal effect of offer, acceptance and consideration. Uniform Commercial Code definitions, consideration of the problems affecting Article 3 — commercial paper; definitions and consideration of problems affecting Article 4 — bank deposits and collections (negotiable instruments); definitions and consideration of problems affecting Article 9 — secured transactions.
3 semester hours

LEGAL ASSISTANT STUDIES 104
Legal Writing.
To give the paralegal a working knowledge of the Connecticut Rules of Practice and procedure. Heavy emphasis is placed on learning to draft pleadings, motions, memoranda of law, and briefs. In addition, the Code of Professional Responsibility is examined through class discussion and hypothetical examples.Prerequisite: Legal Research, Legal Assistant Studies 102
3 semester hours

LEGAL ASSISTANT STUDIES 105
Torts.
A general overview of torts, the nature of a tort (civil wrong), who may be liable, and the extent of liability and defenses.
2 semester hours

LEGAL ASSISTANT STUDIES 205
Business Organizations and Administrative Law.
A general overview of the law of business organizations, formation, operation, and dissolution of partnerships, corporations, and limited partnerships are studied with emphasis on the practical application of this body of knowledge in the law office. The principles governing administrative agencies and their powers, and remedies available.
3 semester hours

LEGAL ASSISTANT STUDIES 206
Property and Conveyancing.
An introduction to the law of real and personal property; nature of property, possession and its consequences; acquisition of property and transfer. A study of practical problems involving conveyances from the drafting of purchase and sale agreements to the passing of title papers; mechanics of the title examination, mortgages and foreclosures.
4 semester hours

LEGAL ASSISTANT STUDIES 208
Estate, Probate and Taxation.
Students will be introduced to the basic concepts of wills, estates and trust law, emphasis upon creation and administration

of same. Definitions, consideration of problems relative to the disposition of property; impact of federal income, inheritance, and estate and gift tax will be discussed, Probate Court practice and procedures.
3 semester hours

LEGAL ASSISTANT STUDIES 305
Computer Technology in the Law Office.
The concepts and vocabulary, capability and limitations of computers and their application to the practice of law. Specific software packages will be used and each student will have "hands-on" experience.
3 semester hours

LEGAL ASSISTANT STUDIES 307
Litigation.
A study of civil litigation, phases of trial preparation, preparation of court documents, remedies and defenses, affirmative defenses, jurisdiction, introduction to federal and state procedure, pleadings, gathering of evidence, etc.
3 semester hours

LEGAL ASSISTANT STUDIES 309
Domestic Relations.
A broad background in the field of domestic relations, marriage, dissolution of marriage, separation agreements, custody, alimony, and child and family problems. Support and property division will also be studied.
3 semester hours

LEGAL ASSISTANT STUDIES 310
Internship.
An arranged internship with a law office, corporation, or private practitioner to acquaint the student with the practical aspects of a paralegal career.
3 semester hours; by arrangement and with permission of Director

LEGAL ASSISTANT STUDIES 311
Patents, Trademarks, Copyrights.
This course embraces the fundamentals of patent law, copyright and trade secret law, legally protected ideas and designs, and the fundamentals of trademark law, unfair competition.
3 semester hours

Management and Industrial Relations

MANAGEMENT 300
Interpersonal and Group Behavior in Organizations.
The student is introduced to behavior in organizations on interpersonal, group and intergroup levels. Group process is examined on both conceptual and experiential levels to enhance understanding of interpersonal and group processes, as well as to test and hone individual interpersonal and group participation skill. Theories of Social Psychology and Group Sociology are examined and applied. Prerequisite: junior or senior status.
3 semester hours

MANAGEMENT 301
Operations Management.
The student is introduced to the basic tools and concepts used in managing the delivery of products and services. Inventory cost control, work flow design, development of work standards, workplace layout, quality control, project management, forecasting, capital investment planning, capacity policy and related methods for management of operations are presented in this course. Prerequisite: junior or senior status.
3 semester hours

MANAGEMENT 302
Multicultural Management.
This course introduces students to the basics of organization and management theory, as they apply to the global market place. A cross-cultural approach is used to examine the similarities, differences and application of theory across national boundaries; and to identify those structural constants that permit business to be conducted on a global scale. Organization culture, role structure, coordination and control methods, leadership, and business strategy are the basic theoretical constructs introduced and evaluated in the course. Prerequisite: junior or senior status.
3 semester hours

MANAGEMENT 305
Human Resource Issues in Management.
The student is introduced to current theory, research and practice in the management of human resources in organizations. Job design, recruitment, selection, performance feedback, goal setting, training, employee rights, safety, compensation and benefits issues are reviewed within the context of their application in the US as a world standard for such practices, with comparisons to customs and practices in the international arena. Prerequisite: Management 302; junior or senior status.
3 semester hours

MANAGEMENT 311
Human Resource Management Programs and Skills.
Students in this course will examine the major foundation programs and skills that undergird the current practice of Human Resource Management. Theory and method used in the design of compensation systems is explored, interviewing method and skill as applied to data gathering for problem solving or personnel selection, surveys for compensation benchmarking or employee attitude measurement, and development of performance feedback and goal setting (MBO) programs are intensively reviewed. Student projects in program applications are required. Prerequisite: Management 302; junior or senior status.
3 semester hours

MANAGEMENT 320
Entrepreneurship and Small Business Management.
For starting or buying a new business, it is critical to develop practical business plans, obtain financing, develop a marketing plan, project cash flow, organize the business, and develop financial controls to take advantage of opportunities in both domestic and international markets. Work is done in teams and computer analysis is used. Prerequisites: Accounting 102, Marketing 305, and Management 302.
3 semester hours

MANAGEMENT 335
Advanced Operations Management.
The student applies PC-based operations-management software programs to problems of forecasting, inventory management, capacity planning, project management, work standards analysis and related operations issues. The course is pursued

in a practice mode with the requirement that each student develop operations management projects and develop them through appropriate PC software. Methods introduced in Management 301 are represented in the software used. Prerequisite: Management 301; junior or senior status.
3 semester hours

MANAGEMENT 340
Conflict and Negotiation.
The development of conflict-management and negotiating skills with particular emphasis on achieving effective and efficient outcomes within a global and multi-cultural context. Experiential exercises, readings and discussions will demonstrate various strategies for a broad range of negotiating scenarios, e.g., buyer-seller, management-labor, personal salary increase, cross-national, etc. Prerequisite: junior or senior status.
3 semester hours

MANAGEMENT 342
Labor Law and Arbitration.
Modern labor legislation and its practical impact on present relations between labor and management. Increasing role of government through federal statutes and agencies. Historical background, principles, procedures and judicial aspects of arbitration process. Nature and function of arbitration; powers of arbitrator; and arbitration cases. Prerequisite: Management 305; junior or senior status.
3 semester hours

MANAGEMENT 350
Business Policy and Strategy.
A study of decision-making including integrating analyses and policy determination at the overall management level. Students search for new knowledge and solutions to long and short term problems and opportunities in specific businesses. The coordination, integration and innovative application of theory and methods learned in previous courses are the tools of research. Accordingly, the final examination of each course shall constitute, therefore, an outcome assessment of what the student has learned in the program. This examination, normally an extensive and comprehensive case study, will be graded by several faculty members representing different and relevant disciplines.
3 semester hours; open only to seniors

The following courses are suggested for those students who wish to take elective courses in other disciplines which are related to or useful in the practice of management:

Communication in Industry.
—See Mass Communication 385.
Industrial Psychology.
—See Psychology 309.
Social Psychology.
—See Psychology 305.
Tests and Measurements.
—See Psychology 323.

Management Information Systems

MANAGEMENT INFORMATION SYSTEMS 191
Computer Concepts.
This is a hands-on course which will acquaint the student with standard productivity tools available for PC-compatible computers. In particular, the student will learn word processing, spreadsheets, database, and presentation packages. Extensive practice projects will be required.
3 semester hours

MANAGEMENT INFORMATION SYSTEMS 291
Business Applications Programming.
For Business majors, this course introduces structured, top-down business applications programming through the QBasic or Visual Basic languages. The business orientation of this course means that the emphasis is on program design for ease of use and ease of maintenance. A semester-long, relatively sophisticated project is required. Prerequisites: Management Information Systems 191 and Sophomore standing.
3 semester hours

MANAGEMENT INFORMATION SYSTEMS 300 (ADS 300)
Management Information Systems.
This course is a brief introduction to Information Systems and is designed to make the non-specialist user a more knowledgeable participant in the application and development of Information Systems for managerial decision making. His course develops the fundamental knowledgeable, philosophy, and skills necessary for specification, development and utilization of computer-based information systems. Prerequisite: junior or senior status.
3 semester hours

MANAGEMENT INFORMATION SYSTEMS 304
Introduction to Database.
This course is an introduction to database concepts, principles, and practices. Emphasis is on the object-oriented logical design of relational databases. Hands-on practice in SQL is gained through use of XDL-SQL. Students are required to do a term project. Prerequisite: Management Information Systems 291 or equivalent; junior or senior status.
3 semester hours

MANAGEMENT INFORMATION SYSTEMS 311
Selected Topics in Applications Programming.
Advanced business applications programming projects. Content may vary depending on student interests, but will commonly consist of C/C ++ applications programming in the fall and Windows applications programming in the spring. May be repeated for credit with change of content. C/C ++ programming is not open to CS or CE majors. Prerequisites: Management Information System 291, Management Information System 300.
3 semester hours

MANAGEMENT INFORMATION SYSTEMS 320
Information Systems Analysis and Design
The analysis and design of transaction-based information systems with emphasis on data requirements, ease of use, and ease of enhancement. Complete specification and design of transaction-based business system will be accomplished through a semester-long project. Prerequisites: Management Information Systems 291, Management Information Systems 300.
3 semester hours

MANAGEMENT INFORMATION SYSTEMS 325
Selected Topics in Information Systems Analysis and Design.
The specification and design of various decision support systems developed from transaction-based information systems. Content may vary according to student interests, but will typically consist of either Quality Management Systems, Manufacturing Systems, Distribution Systems, Financial Services Systems, or Marketing

Systems. Prerequisites: Management Information Systems 291, Management Information Systems 300.
3 semester hours

MANAGEMENT INFORMATION SYSTEMS 356
Expert Systems.
An introduction to expert systems (knowledge-based systems) for managerial decisions. Topics include: overview of artificial intelligence, expert systems in general and for managerial decisions, rules and reasoning, inference engines, forward and backward chaining, certainty factors and fuzzy variables, other knowledge representation approaches, neural networks. A PC-based expert system shell is used by students in developing their term projects.
3 semester hours

MANAGEMENT INFORMATION SYSTEMS 357
Telecommunications.
An introduction to telecommunications (voice and data). Topics include: communications concepts, hardware and software, network configurations, common-carrier and value-added networks (VANs), local area networks (LANs), network design fundamentals, protocols and standards, network management, security, and control.
3 semester hours

MANAGEMENT INFORMATION SYSTEMS 356
Expert Systems.
An introduction to expert systems (knowledge-based systems) for managerial decisions. Topics include: overview of artificial intelligence, expert systems in general and for managerial decisions, rules and reasoning, inference engines, forward and backward chaining, certainty factors and fuzzy variables, other knowledge representation approaches, neural networks. A PC-based expert system shell is used by students in developing their term projects.
3 semester hours

Management Science

MANAGEMENT SCIENCE 110
Introduction to Management Science.
Mathematical concepts, algebraic skills, and business problem-solving methods with deterministic models. Coverage includes systems of linear equations and inequalities, breakeven analysis, formulation of linear programming (LP) models, interpretation of LP solutions, sensitivity and duality, and introduction to financial mathematics. Prerequisite: Passing Math Competency Exam or minimum grade of "C" in Math C105; reserved for Business students.
3 semester hours

MANAGEMENT SCIENCE 115
Probability for Business.
Basic concepts of probability as applied to business and economic decision making. Topics include counting schemes, probability rules, Bayes' formula, discrete probability distributions (Bernoulli, binomial, hypergeometric), continuous distributions (normal, Poisson, exponential), and an overview of random sampling for statistics. Prerequisite: Passing Math Competency Exam or minimum grade of "C" in Math C105; reserved for Business students.
3 semester hours

MANAGEMENT SCIENCE 120
Statistical Decision Making for Business and Economics.
This course provides the student with basic statistical techniques for decision making in business and economics. The course covers sampling techniques, interval estimates, hypothesis testing for means and proportions, one-way analysis of variance, Chi-square contingency analysis, simple linear regression and correlation, and multiple regression. Computer solutions are emphasized throughout, the students must be able to do computations by calculators. Prerequisite: Management Science 115 or equivalent.
3 semester hours

MANAGEMENT SCIENCE 140
(Identical to Math 106)
Calculus for Business and Economics.
Essential concepts of differential and integral calculus as applied to business and economic decision making, including a review of the required mathematical skills. This course satisfies the calculus requirement for M.B.A. admission and is recommended as an elective for students anticipating graduate study in business. Prerequisite: Management Science 110 or Mathematics 109 or equivalent.
3 semester hours

Marketing

MARKETING 305
Principles of Marketing.
The scope and significance of marketing. The retailing and wholesaling of consumer goods. Marketing agricultural and industrial goods. Marketing policies and practices of business firms. Prerequisite: junior or senior status.
3 semester hours

MARKETING 306
Consumer Behavior.
A qualitative analysis of marketing as a system for the satisfaction of human wants. The contribution of psychologists, sociologists, anthropologists, and other behavioral scientists to the understanding of consumer behavior. Such topics as motivation, learning, life-cycle and social-class analysis, culture and custom. Prerequisite: junior or senior status.
3 semester hours

MARKETING 307
Management of Promotion.
Advertising, personal selling, trade support, and public relations as elements of strategy. Situation analysis planning, execution, and evaluation of promotional campaigns. Social responsibilities of the firm and some of its ethical problems. The impact of consumerism. Prerequisite: Marketing 305; junior or senior status.
3 semester hours

MARKETING 308
Marketing Research.
Objectives, techniques, and limitations of library and field research applied to advertising, retailing, or sales management problems. Assignment of group projects requiring considerable initiative and resourcefulness. Measurements of individual accomplishment by both group activity and individual evaluation of the project. Prerequisites: Management Science 120 and Marketing 305; junior or senior status.
3 semester hours

MARKETING 310

Service Marketing.

Marketing in service industries, stressing the unique problems of marketing intangibles. This course focuses on the development, implementation and control of strategy, systems and people for effective service operations. Case studies are selected from professional services, transportation, hotels and resorts, and various other retail services. Prerequisite: Marketing 305.
3 semester hours

MARKETING 319

Advertising Management.

A critique of advertising from the viewpoint of management. Case problem-solving of situations that have confronted businessmen. The impact of advertising on demand for products and services. Principal problems in the building, implementing, and evaluating of advertising programs. Prerequisite: Marketing 305; junior or senior status.
3 semester hours

MARKETING 325

Sales Management.

Management of manufacturer's salesmen. Sales department organization. Selecting, training, compensating, and supervising salesmen. Sales territories, travel expenses, quotas, and budgets. Principles are applied to concrete problems. Prerequisite: Marketing 305; junior or senior status.
3 semester hours

MARKETING 339

Retailing Management.

Use of the case method to analyze and solve problems faced by senior retail executives. Case histories set forth detailed background information to train the student in developing alternative solutions and choosing from among them. Cases in each of the major fields of retail management, merchandising, publicity, personnel, control, and service activities. Prerequisite: Marketing 305; junior or senior status.
3 semester hours

MARKETING 342

Multinational Marketing.

Lecture and case studies, exploring cultural, political, economic and legal aspects of the development and operation of companies marketing overseas. Planning, organizing, controlling, and promoting for industrial and consumer goods. Prerequisite: junior or senior status.
3 semester hours

MARKETING 350

Marketing Management.

The nature and scope of marketing management. The interpretation of environmental factors affecting marketing decisions and application of managerial concepts to marketing strategy. Adaptation of resources and objectives in the development of marketing plans. Prerequisite: junior or senior status.
3 semester hours

Mass Communication

MASS COMMUNICATION 110

Public Communication.

The process and variables of everyday public address are examined through situations, content, presentation strategies and effects, and by classroom practice in the basic principles of oral communication.
3 semester hours

MASS COMMUNICATION 111

Introduction to Mass Communication.

The role and function of the mass media. Survey of newspapers, magazines, books, radio, television, film, advertising and public relations. Criticism, challenges and professional opportunities.
3 semester hours

MASS COMMUNICATION 200

Co-Operative Education.

Professional, supervised work in an organization related to career goals. Prerequisite: Permission of department required.
1-3 semester hours

MASS COMMUNICATION 201

Persuasive Communication.

Study of communication as a form of influence; the process and functions involved, its potential and limitations; social and personality factors related to persuasibility, attitude formation and change. Students will analyze and present persuasive messages.
3 semester hours

MASS COMMUNICATION 205

Interpersonal Communication.

An introductory survey of interpersonal communication theories and their application to face-to-face, group, organizational and mediated contexts. The classroom becomes a laboratory for gaining knowledge of the processes of communication, perception, language and meaning.
3 semester hours.

MASS COMMUNICATION 220

Introduction to Advertising.

An examination of the theories and practices of advertising. Historical, legal, and social psychological aspects of advertising. Advertising explored from both client side and agency side perspectives.
3 semester hours

MASS COMMUNICATION 240

News Reporting.

Introduction to reporting techniques — sources of news, interviewing, public document and database searches — and their application in writing various forms of news stories.
3 semester hours

MASS COMMUNICATION 270

Public Relations.

Current practices and problems, with emphasis on the role of the public relations practitioner as a specialist in communications, analyst of public opinion, and counselor to the major sponsors of public communication.
3 semester hours

MASS COMMUNICATION 284

Business and Professional Communications.

Understanding and development of communications skills necessary for individuals to function effectively in business and corporate roles. Special consideration given to the verbal and nonverbal elements of the work situation: barriers to communications, listening skills, interviewing, instructional skills, forms of negotiation, technical reports, and principles of group behavior. Students' skills are assessed relative to the levels of communication required in various career areas.
3 semester hours.

MASS COMMUNICATION 304

Communication Research Design.

Construction of communication theory, development of communication models, and relation of empirical investigation to theories of interpersonal and public communication. Research design, sample selection, and methods appropriate to field, experimental, and survey research in communication.
3 semester hours

MASS COMMUNICATION 306

Argumentation and Debate.

Knowledge and practice in the craft of research and reasoning in argumentative communication. Practice in analysis, evidence, briefing, refutation, and delivery of arguments.
3 semester hours

MASS COMMUNICATION 323

Advertising Copywriting.

Critical study and application of communication principles and concepts as applied to planning and preparing advertising messages. Intuitive versus research based aspects of advertising creativity. Writing and visualization for print, broadcast, and peripheral media.
3 semester hours

MASS COMMUNICATION 330

Advertising Media Planning.

An investigation of various mass media audiences' characteristics, preferences and composition and how that information is obtained and used in planning media strategy in advertising. Topics include: characteristics and evaluation of major media; rates and sources of information; problems of coverage, dupli-plication, costs and scheduling.
3 semester hours

MASS COMMUNICATION 338

Applied Mass Communication Research.

An advanced course examining the analytical tools and methods for the identification, collection and analysis of information relevant to decision-making by the communication practitioner. Topics include: understanding of the use of secondary data sources, qualitative research techniques such as focus group interviews and participant observation, and quantitative techniques such as surveys and experimentation. Prerequisite: Mass Communication 304.
3 semester hours.

MASS COMMUNICATION 339

Advertising and Public Relations Campaigns.

In-depth analysis and practice in strategies and tactics employed in creating advertising and public relations programs for clients. Principal focus on working on a competitive group project preparing an agency-style presentation for a real or hypothetical client. Prerequisites: Mass Communication 220, 323, 330.
3 semester hours

MASS COMMUNICATION 340

The Community Newspaper.

A total working environment centered about the publication of a community newspaper. Reporting, coverage of beats, interviews, handling complex stories and in-depth news reports.
4 semester hours

MASS COMMUNICATION 341

The Magazine and Feature Story.

An in-depth experience of writing for periodicals. Focus is on the additional research and preparation needed for this medium. Principles of advocacy and rhetoric and their relevance in the news media are explored.
3 semester hours

MASS COMMUNICATION 345

Newspaper Editing and Production.

Principles of editing in print media. The editorial process from selection of editorial materials to publication. Analysis of contemporary editing styles. Preparation of materials for production, including copy editing, writing headlines and designing newspaper pages. Legal and ethical issues confronting newspaper editors. The editor-writer relationship. Laboratory training in the making of editorial judgments.
3 semester hours.

MASS COMMUNICATION 346

Media Management.

Examination of the internal functioning and management practices related to the various media institutions. Discusses management by objectives, work plans, analysis methods, budget-setting, research planning, message strategy and plans, media/channel strategy and plans, and evaluation methods related to communication activities. Emphasis is on developing integrated approaches to solving communication problems under changing environmental conditions.
3 semester hours

MASS COMMUNICATION 360

Broadcast News Writing.

A course on writing news for broadcast media. Emphasis on broadcast style, specificity of language, time constraints, writing to tape and other actualities, and other considerations unique to radio and television news. Prerequisite: Mass Communication 240.
3 semester hours

MASS COMMUNICATION 370

Publicity Methods.

Elements of publicity writing for mass media. Students may work for not-for-profit organizations in planning and implementing publicity campaigns or other public relations projects.
3 semester hours

MASS COMMUNICATION 384

Organizational Communication.

Communication in formal organizations, such as schools, industry, hospitals, and government, with emphasis on how organizational variables affect communication behavior of humans at work. Simulation, role-playing, case method, and videotape are used as techniques for evaluating personal and organizational effectiveness.
3 semester hours

MASS COMMUNICATION 390

Media Law and Ethics.

Legal interpretations and standards of judgment that affect the reporter and the mass media. Theory of the First Amendment. Problems of libel, privacy, censorship, contempt, news source protection. Relationship of media regulations to community standards and social mores.
3 semester hours

MASS COMMUNICATION 395

Studies in Mass Communication.

A senior seminar, with emphasis on the analysis of mass media institutions, content, functions, and policy. Problem-centered approach, requiring

experimentation in media forms and journalistic inquiry. Prerequisite: Senior standing within the Department of Mass Communication.
3 semester hours

MASS COMMUNICATION 398
Internship.
Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of department required.
3 semester hours.

MASS COMMUNICATION 399
Independent Study.
Advanced project not covered by a regular course offering. Term paper or other academic fulfillment project is required. Faculty sponsor must be secured in advance. Prerequisite: Permission of the department and School Director is required.
By arrangement; 1-6 semester hours

Mathematics

MATHEMATICS 100
Elementary Algebra.
An introductory course in basic algebra with applications. Topics include fundamental operations, fractions, real numbers, algebraic equations, linear equations and inequalities, exponents and polynomials, factoring and rational equations.

This is a course for those students who are not ready for Math C105, Intermediate Algebra. This course is a three university semester hour course which means it does not meet distribution requirements or count toward the minimum semester hour requirement for graduation. This course is not open to those students who have passed the Math Placement Exam (Basic Algebra Exam) or passed Math C105 or above.
3 periods; 3 semester hours

MATHEMATICS C105
Intermediate Algebra.
A survey course in selected topics from college algebra and elementary functions. This course satisfies the Core Curriculum Basic Skills mathematics requirement. Topics include set notion, number systems, rules of algebra, operations with polynomials, factoring, linear equations and inequalities, solving polynomial equations, linear systems, and functions. Prerequisite: "C-" or better in Math 100 or Mathematics Placement Exam.
4 periods; 3 semester hours

MATH C105A
Intermediate Algebra.
Selected topics from college algebra and the elementary functions covered at a slower pace than Math C105. Prerequisite: Math 100 or Placement Exam.
4 periods; 3 semester hours

MATHEMATICS 106
Brief Calculus.
A survey of differential and integral calculus for students in the behavioral, life and social sciences. Limits and continuity. Definition of the derivative. Rules for differentiation, the anti-derivative. Indefinite and definite integrals. Selected topics in analytic geometry. Applications from business, economics and life sciences. The course does not cover trigonometry functions. Prerequisite: "C-" or better in Math C105. Placing into Math 109 on Mathematics Placement Exam.
3 periods; 3 semester hours

Brief Calculus is not available for credit to students majoring in chemistry, engineering, mathematics, or physics.

MATHEMATICS 107
Finite Mathematics.
A course for non-science majors covering fundamentals of set theory, logic, probability, game theory, Boolean algebra and linear programming. Prerequisite: Math C105.
3 periods; 3 semester hours

MATHEMATICS 108
Ideas of Mathematics.
A survey of mathematical ideas and their applications. The course will focus on five core areas: logic, algebraic systems, functions and graphs, analysis, and probability and statistics. Applications will be drawn from the social sciences, natural sciences, arts and technology. The course will introduce the use of graphing calculators and computer applications software as tools to enhance creative thinking. Intended for non-specialists, the course will explore the beauty and power of mathematical reasoning through problem-solving and readings. Prerequisite: Competency in high school level Intermediate Algebra as demonstrated by the University placement exam or completion of Math C105 with a"C-"or better.
4 periods, (3 lecture/1 lab); 3 semester hours

MATHEMATICS 109
Precalculus Mathematics.
A course for those intending to study calculus at the university level. Topics from college algebra and trigonometry. Definition of function. Algebra of functions. Elementary functions and their graphs. Inverse functions. Polynominals, rational and algebraic functions. Trigonometric identities. Systems of equations. Cramer's rule. Augmented matrices and Gaussian elimination. Prerequisite:"C-"or better in Math C105 or Mathematics Placement Exam.
4 periods; 4 semester hours

MATHEMATICS 109A
Precalculus Mathematics.
This course covers the same material as Math 109 at a slower pace. Prerequisite: 2 years high school algebra and Mathematics Placement Exam.
5 periods; 4 semester hours

MATHEMATICS 110
Calculus and Analytic Geometry I.
Review of functions. Limits and continuity of functions. Composite functions. Definition of the derivative. Derivatives of algebraic and trigonometric function. Rules for differentiation; sum rule, difference rule, product rule, quotient rule, chain rule. Rolle's Theorem and the Mean Value Theorem. Applications of the derivative; equations of motion, linear approximation of functions, error analysis, topics from geometry, maxima and minima of functions, curve sketching, related rates. L'Hopital's rule. Antidifferentia-tion and the indefinite integral. Fundamental Theorem of Calculus. Definite integrals. Integration by substitution. Applications of integration. Areas and volumes. Introduction to Derive™ symbolic manipulation software.Prerequisite:"C-"or better in Mathematics 109 or Mathematics Placement Exam.
5 periods; 4 semester hours

MATHEMATICS 111

Accelerated Calculus and Analytic Geometry I.

Covers the same material as Mathematics 110, but at a faster pace. Either Mathematics 110 or 111 is required of the mathematics majors. Prerequisite: four years of high school math or Math 109.
4 periods; 4 semester hours

MATHEMATICS 112

Calculus and Analytic Geometry II.

Derivatives and integrals involving exponential and logarithmic functions. Inverse trigonometric functions. Hyperbolic functions. Techniques of integration. Substitution. Trigonometric substitution. Parametric equations. Polar coordinates. Integration by parts. Integration via partial fraction expansion. Integral tables and symbolic manipulation software. Improper integrals. Infinite sequences and series. Taylor and MacLaurin series. Applications from geometry, engineering and physics. Prerequisite:"C-"or better in Mathematics 110.
4 periods; 4 semester hours

MATHEMATICS 200

Mathematics Cooperative Work Study.

Students entering the Mathematics Cooperative Education Program take this course each semester that they are employed full-time in paid work assignments. A written report will be required describing achievements resulting from the work experience. Prerequisite: Completion of at least 30 semester hours and permission of the Department.
1 semester hour with a maximum of 6 semester hours to be applied to the degree

MATHEMATICS 203

Elementary Statistics.

A non-calculus introduction to applied statistics for business, life and social science students. Probability. Classification of data, averages, dispersion, frequency distributions, confidence intervals, and test of significance. Elementary linear regression and correlation. The course will make extensive use of MINITAB™ statistical software. Prerequisite: Math C105.
3 periods;3 semester hours

MATHEMATICS 214

Linear Algebra.

System of linear equations and matrix algebra, determinants, vector spaces, eigenvectors, linear transforms and inner product spaces. Required of mathematics majors. Co-requisite: Math 215.
3 periods; 3 semester hours

MATHEMATICS 215

Calculus and Analytic Geometry III.

Vectors; two and three-dimensional vector spaces, Cartesian coordinates, scalar and vector product, triple products, normal vectors and curvature, tangential vectors. Partial differentiation; functions of several variables, linear approximations, extrema of surfaces, Lagrange multipliers. Vector calculus and analytic geometry, gradient of a scalar function, divergence and curl of vector functions. Coordinate systems; spherical and cylindrical coordinates. The Jacobian of transformation. Multiple integrals in cartesian and other coordinate systems. Areas and volumes. Stroke's Theorem and Green's Theorem. Prerequisite:"C-"or better in Mathematics 112.
4 periods; 4 semester hours

MATHEMATICS 227

Discrete Structures.

This course is an introduction to some of the discrete mathematical structures relevant to computer science, including set theory, propositional calculus, predicate calculus, algebraic operations and relations, counting techniques and graph theory. Required of Math majors. Identical to Computer Science 227. Prerequisite: Math 112; Computer Science 101 or Computer Science 184.
3 periods; 3 semester hours

MATHEMATICS 301

Differential Equations.

Ordinary differential equations with applications. Initial value problems and elementary boundary value problems. First order differential equations; linear, separable, homogeneous, and exact. Integrating factors. Second and higher order linear differential equations; homogeneous equations with constant coefficients, characteristics equations and their roots, homogeneous Euler type equations. Forms of the general solution. Nonhomogeneous equations; method of undetermined coefficients and method of variation of parameters. Series solutions about ordinary and regular singular points. Laplace transform methods for initial value problems. Second order boundary value problems; eigen-functions and eigenvalues. Systems of first order linear differential equations. Numerical methods; Taylor series expansions and Runge-Kutta methods. Prerequisite:"C-"or better in Mathematics 112.
3 periods; 3 semester hours

MATHEMATICS 314

Numerical Methods.

A first course dealing with basic numerical methods for finding roots of non-linear equations, interpolation theory, approximation of functions, numerical integration and differentiation, numerical solutions of systems of linear equations, the matrix eigenvalue problem and the numerical solutions of ordinary differential equations. Prerequisite: Computer Science 101 or 184; Math 214 or 227.
3 periods; 3 semester hours

MATHEMATICS 319

Introduction to the Theory of Numbers.

Fundamental properties of integers, divisibility, primes. Congruence and quadratic residues. Number theoretic functions. Diophantine equations. Continued fractions and Pell's equation. Elementary results on the distribution of primes. Especially recommended for prospective secondary school teachers. Prerequisite: Math 215 or permission of the instructor.
3 periods; 3 semester hours

MATHEMATICS 323

Probability and Statistics I.

Classical theory of probability. Sample spaces, probability and conditional probability, random variables and their distributions. Standard discrete distributions, normal distributions, moment generating functions and central limit theorems. Prerequisite: Math 215.
3 periods; 3 semester hours

MATHEMATICS 336

Linear Programming.

Linear programming formulation of optimization problems, hyperplanes, convex sets, linear independence, bases of vector spaces, matrix inversion, theory and computation techniques of simplex, revised simplex methods, degeneracy, duality. Transportation and assignment problems,

integer programming and network flows. Prerequisite: Math 214, Computer Science 227.
3 periods; 3 semester hours

MATHEMATICS 347
Advanced Calculus I.
Limits, continuity, differentiality, integrability. Functions of several variables, partial differentiation, implicit functions, multiple integrals, line integrals, Green's theorem. Required of mathematics majors. Prerequisite: Math 215.
3 periods; 3 semester hours

MATHEMATICS 348
Advanced Calculus II.
Continuation of Mathematics 347. Line and surface integrals, Green's theorem, limits, indeterminate forms, infinite series, improper integrals, Fourier series. Prerequisite: Math 347.
3 periods; 3 semester hours

MATHEMATICS 357
Applied Algebraic Structures.
A sequel to Discrete Structures (Math 227), this course includes both the theoretical detail and computer applications of algebraic structures, including algebraic operations and relations, advanced counting techniques, and topics from applied linear algebra, finite fields, computability or graph theory. Identical to Computer Science 357. Prerequisite: Math 214 and Math 227.
3 periods; 3 semester hours

MATHEMATICS 380
Selected Topics in Mathematics.
Selected topics such as calculus of variations which are not currently in other Mathematics courses. Topics will vary from semester to semester. May be taken more than once for credit when topics are different.
1-3 semester hours

MATHEMATICS 391
Modern Algebra.
Set theory, including the concepts of mapping and denumerable and non-denumerable sets. Study of abstract structures such as groups, rings, fields and algebras. Required of mathematics majors; Prerequisite: Math 214.
3 periods; 3 semester hour

MATHEMATICS 393
Senior Seminar in Mathematics.
This course is, in part, designed to acquaint the participants with mathematics reference works, resource materials, periodicals, and expository writings. Each student is required to write several papers and to make periodic oral presentations. Visiting speakers conduct some of the seminars. Required of mathematics majors and normally taken in the junior or senior year. Prerequisite: Math 214 or permission of instructor.
3 periods; 3 semester hours

MATHEMATICS 399
Independent Study.
Prerequisite: Permission of Department Chair.
1-3 semester hours

The following mathematics courses, described in the Graduate Catalog of the College of Science and Engineering are also open to selected upperclassmen: 401, 402—Advanced Analysis for Scientists and Engineers I and II.

MATHEMATICS 401
Advanced Analysis for Scientists and Engineers I.
Partial differential equations, Bessel functions, Legendre polynomials. Fourier series, boundary and initial value problems, topics in vector analysis, tensor analysis. Prerequisite: Math 301 (Differential Equations) and one semester of advanced calculus strongly recommended.
3 semester hours

MATHEMATICS 402
Advanced Analysis for Scientists and Engineers II.
Functions of a complex variable conformal mapping, calculus of residues, operators. Prerequisites: Math 301 (Differential Equations) and one semester of advanced calculus, or permission of the instructor.
3 semester hours

Mechanical Engineering

MECHANICAL ENGINEERING 208
Introduction to Thermal Engineering
This course will introduce undergraduate engineering majors to three important inter-related areas of Mechanical Engineering (thermodynamics, fluid mechanics and heat transfer). The increased emphasis placed on energy in our society makes it necessary for all engineers to have a basic understanding of thermal engineering. Prerequisites: Math 112, Mechanical Engineering 252.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 253
Solid Mechanics I.
Development of concepts of stress and strain in deformable bodies with application to the analysis of common structural components. Axially loaded members, torsion of circular shafts; stresses and deflections in beams; beam shear and moment diagrams; column buckling. Stress transformations, Mohr's circle, combined stresses. Prerequisites: Engineering 115. Co-requisite: Mechanical Engineering 253L.
3 lecture hours; 3 semester hours;
1 design semester hours

MECHANICAL ENGINEERING 253L
Solid Mechanics I Laboratory.
Introduction to engineering experimentation and the communication of results through engineering reports. Experimental investigations of the mechanical behavior of materials such as tension tests of metals and polymers; compression, torsion and bending tests. Use of electrical resistance strain gauges. Co-requisite: Mechanical Engineering 253.
3 laboratory hours; 1 semester hour

MECHANICAL ENGINEERING 305
Advanced Strength of Materials.
An integrated treatment of stress analysis and materials engineering essential for the practice of mechanical engineering design. Properties and processing of polyphase metal alloys, ceramics and plastics. Strength under combined stresses. Behavior beyond the elastic range. Shock, impact and fatigue. Energy methods. Stress concentration. Buckling. Prerequisites: Mechanical Engineering 253, 253L, Engineering 223.
3 lecture hours; 3 semester hours;
1 design semester hour

MECHANICAL ENGINEERING 307

Fluid Mechanics.

Properties of fluids. Fundamental concepts. Fluid Statics. Fundamental equations for a control volume. Differential analysis of fluid motion. Incompressible viscous flow. Dimensional analysis and similitude. Incompressible viscous flow in pipes and ducts. Measurement of flow and fluid properties. Prerequisites: Mathematic 301, Engineering 115.
3 lecture hours; 3 semester hours;
1 design semester hour

MECHANICAL ENGINEERING 307L

Fluid Mechanics Laboratory.

Demonstrations and laboratory experience to complement subject matter covered in Mechanical Engineering 307 and to provide an introduction to experimental methods and testing techniques used in fluid mechanics, and fluid machinery. Experimental methods, data representation for measurement of fluid properties, viscometry. Transducers, signal processing and data reduction techniques for measuring average and fluctuating pressures and velocities in flow systems; e.g., manometry, piezoelectric transducers, pitot, static and flow direction probes, hot wire, film and laser anemometry. Flow metering techniques and instruments. Application to duct systems, turbo machinery and external flows. Co-requisites: Mechanical Engineering 307.
3 laboratory hours; 1 semester hour

MECHANICAL ENGINEERING 308

Thermodynamics I.

Classical thermodynamics developed from the macroscopic concept. Properties of pure substances. The ideal gas. State diagrams and use of property tables. Work and heat for both simple compressible systems and non-compressible systems. The continuity equation. The First and Second laws of Thermodynamics and applications. The Carnot Cycle, Entropy. Introduction to thermodynamic power cycles. Prerequisite: Engineering 115.
3 lecture hours; 3 semester hours;
1 design semester hour

MECHANICAL ENGINEERING 309

Fluid Mechanics II.

Continuation of first course in fluid mechanics, ME 307. Introduces the student to more advanced topics including laminar and turbulent boundary layer theory, lift and drag, subsonic and supersonic compressible flow, introduction to turbo-machinery and introduction to computational fluid mechanics. Prerequisites: Mechanical Engineering 307, Computer Science 184 or Computer Science 101.
3 periods; 3 semester hours;
1 design semester hour

MECHANICAL ENGINEERING 310

Thermodynamics II.

Applications of thermodynamic principles to engineering problems. Analysis of power and refrigeration cycles. Availability and irreversibility. Mathematical relations between properties. Non-reacting mixtures. Psychrometrics. Combustion principles. Prerequisite: Mechanical Engineering 308.
3 lecture hours; 3 semester hours;
1 design semester hour

MECHANICAL ENGINEERING 315

Mechanical Vibrations.

Free and forced vibrations. Damped and undamped, single and multiple-degree-of-freedom systems. Vibration measuring instruments. Normal mode analysis including matrix methods. Lagrange's equations. Approximate and computer methods of analysis. Prerequisite: Engineering 115, Mechanical Engineering 253, Math 301.
3 lecture hours; 3 semester hours;
1 design semester hour

MECHANICAL ENGINEERING 360

Senior Design Project.

Senior level M.E. students must complete an assigned design project as a member of a project team. The topic is chosen by the M.E. faculty so as to exercise as much of the students' previous technical training as possible. A minimum of two faculty members are available to the design team to provide guidance and hear bi-weekly oral progress reports. Written final reports and oral presentations are required. Prerequisites: Engineering 373 and senior standing.
2 lecture hours; 3 semester hours;
3 design semester hours

MECHANICAL ENGINEERING 363

Heat Transfer.

Principles and design applications of heat transfer. Thermal properties. Solutions to steady state and transient thermal conduction by classical numerical methods. Convection principles and concept of boundary layers. Free and forced convection correlations. Heat exchangers and designs. Thermal radiation principles; properties, shape factors and applications. Combined convection and radiation problems. Prerequisites: Math 301, Mechanical Engineering 307, Mechanical Engineering 308. Co-requisite: Mechanical Engineering 363L.
3 lecture hours; 3 semester hours;
1 design semester hour

MECHANICAL ENGINEERING 363 L

Heat Transfer Laboratory.

Experiments to demonstrate heat transfer principles and measurement techniques. Pre-experiment planning and effect of measurement accuracy are emphasized. Selected topics from: measurement of thermal properties, two dimensional thermal conduction, combined convective and radiation cooling, convection correlations, heat exchanger performance and radiation properties. Co-requisite: Mechanical Engineering 363.
3 lab hours; 1 semester hour

MECHANICAL ENGINEERING 364D

Thermal Environmental Engineering.

Design of thermal systems for human comfort. Psychrometrics, comfort criteria, heat load calculation, principles of refrigeration system design, solar applications; heating and air conditioning system design. Course will include design project for complete thermal control system for a typical building. Prerequisite: Mechanical Engineering 363.
3 semester hours; 2 design semester hours

MECHANICAL ENGINEERING 365

Special Problems in Mechanical Engineering.

Hours and semester to be arranged by permission of the Department Chair.

MECHANICAL ENGINEERING 409

Advanced Thermodynamics.

Thermodynamic systems. Transfer of heat. Reversibility and irreversibility. Entropy. Properties of pure substances. Applications of thermodynamics to special systems. Change of phase. The physics of very low temperatures. Chemical thermodynamics. Equilibrium conditions and

stability. Co-requisite: Math 401.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 410
Advanced Fluid Dynamics.
Concept of control volume and general equations of continuity, momentum and energy. Assumptions and conditions for reducing these general equations to subfields of fluid mechanics. Analysis of incompressible and compressible, inviscous and viscous, laminar and turbulent fluid flows. Concept of potential flows: complex number representation and mapping, vorticity and circulation, airfoil and wing theory. Boundary layer theories: laminar and turbulent flows; integral and similarity solution methods; concept of mixing length model. Introduction to compressible flows. Prerequisite: Mechanical Engineering 307 or Mechanical Engineering 309.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 417
Control System Engineering.
Introduction to analysis and synthesis of feedback systems. Dynamic modeling of pneumatic, hydraulic, thermal, electromechanical systems and manufacturing processes. Concept of transfer functions and block diagram representations. Functional description of linear and nonlinear systems. Linearization and dimensionless scaling. State-space representation of dynamic systems. Transient response using convolution integral and computational techniques. Root locus and frequency response methods. Performance indices and error criteria. Controller realization. Case studies. Prerequisite: Mechanical Engineering 315 or Electrical Engineering 319.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 450
Structural Mechanics.
Introduction to matrix algebra. Formulation of stiffness and flexibility matrices. Application to indeterminate frames, beams, rings, and arches. Numerical techniques for the solution of isotropic and anisotropic plates. Introduction to the finite element method of analysis. Problems will be computer-oriented.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 451
Advanced Strength Analysis.
Development of advanced stress analysis techniques such as beams on elastic foundation, membranes of revolution, rotating disks, axisymmetric shrink fit, thermal stress, torsion of noncircular members, and introduction to plate bending theory to help solve design problems. Prerequisite: Mechanical Engineering 305. Co-requisite: Math 401 or permission of instructor.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 452
Advanced Vibrations I.
Brief review of systems with one and two degrees of freedom. Rayleigh's method. Application of Lagrangian and matrix methods to discrete systems with many degrees of freedom; normal mode theory, vibrations of finite continua; solution methods and mathematical properties. Numerical and computer methods; sensitivity analysis. Applications to machines and structures. Prerequisite: Mechanical Engineering 315.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 453
Finite Element Methods in Mechanical Engineering.
Formulation of finite element characteristics using energy methods. Convergence criteria. Consistent load and mass matrices. Inplane and axisymmetric analysis using simple and higher-order triangular and quadrilateral elements. Finite element analysis of plate-bending problems. Isopara-metric concepts and formulation; applications to two- and three-dimensional stress analysis. Topics from the following areas will be chosen as time allows: Buckling and vibration studies using discrete element techniques; finite element applications in fluid flow and heat transfer. Prerequisite: Mechanical Engineering 450 or consent of instructor.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 454
Advanced Dynamics I.
Particle kinematics in inertial and non-inertial rotating coordinate systems. Dynamics of systems particles and rigid bodies. Constrained motion with one or two degrees of freedom. Virtual work and generalized coordinates. Lagrange's equation and Hamilton's principle for holonomic and nonholonomic systems with applications. Lagrange multipliers. Euler angles. Prerequisite: Math 301, Engineering 115.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 456
Mechanics of Composite Materials.
Introduction to the mechanics of laminated filamentary composites. Prediction of stiffness, strength and deflection of laminated plates. Applications to flat and cylindrical panels, pressure vessels, power shafting. Prerequisite: Mechanical Engineering 305 and Math 301 or equivalents.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 458D
Fatigue and Fracture Mechanics.
Brittle fracture of structures, elastic stress analysis of cracked components, static and dynamic failures, plane stress and plane strain, elastic-plastic fracture mechanics, fatigue crack growth and life prediction under constant and variable amplitude loading, environmental effects.Term work is mainly design problems and is computer oriented. Prerequisite: Mechanical Engineering 305.
3 lecture hours; 3 semester hours; 1 design semester hour

MECHANICAL ENGINEERING 463
Advanced Heat Transfer.
Heat conduction in solids: steady and transient states; finned surfaces and multidimensional objects; numerical methods through use of the computer. Free and forced convection from theoretical and experimental viewpoints for laminar and turbulent flows in ducts, over flat plates and blunt bodies, through tube bundles and packed beds. Introduction to the concept of scale analysis; integral methods and similarity solutions. Film condensation and boiling. Radiative heat transfer; properties and shape factors. Prerequisite: Mechanical Engineering 363. Co-requisites: Math 401, Mechanical Engineering 410.
3 lecture hours; 3 semester hours

Medical Technology

MEDICAL TECHNOLOGY 102
Introduction to Medical Technology.
An introduction to the principles and practice of clinical laboratory medicine. Lectures, discussions, and site visits to hospital laboratories are included.
1 hour period; 1 semester hour

MEDICAL TECHNOLOGY 310
Hematology.
Comprehensive study of the principles, procedures, special techniques and disease states of the cellular components of the blood. Includes hemostasis. Introduction to Medical Technology.
5 semester hours

MEDICAL TECHNOLOGY 311
Clinical Chemistry.
Manual and automated biochemical analysis of body fluids in health and disease and the clinical application of test results.
8 semester hours

MEDICAL TECHNOLOGY 312
Clinical Microbiology.
Includes the isolation and identification of clinically significant bacteria from all types of clinical specimens. Also covered: parasitology, virology and mycology. Correlation of laboratory findings to disease states emphasized.
8 semester hours

MEDICAL TECHNOLOGY 313
Immunology and Serology.
A study of the immune response in health and disease and the use of current techniques for the determination of antigen-antibody reactions.
3 semester hours

MEDICAL TECHNOLOGY 314
Immunohematology and Blood Banking.
Human blood groups, compatibility testing, component therapy and their relation to transfusion. Emphasis on problem solving in this field.
3 semester hours

MEDICAL TECHNOLOGY 315
Clinical Microscopy.
Principles of the diagnostic procedures for urine, spinal fluids, feces, gastric contents and other body fluids.
1 semester hour

MEDICAL TECHNOLOGY 316
Special Topics in Medical Technology.
Investigation of a special medical technology subject and /or related topic.
2-4 semester hours

Music

MUSIC 100
Private Lessons.
Private instrumental/vocal lessons are available at a special fee. Each half hour lesson per week is equivalent to 1 semester hour credit. Applied music may be repeated for credit each semester. Prerequisite: Permission of instructor.
1 - 2 semester hours

Music 100 - Bassoon.
Music 100 - Clarinet
Music 100 - Composition.
Music 100 - Conducting.
Music 100 - Flute.
Music 100 - French Horn
Music 100 - Guitar
Music 100 - Harp.
Music 100 - Oboe.
Music 100 - Organ.
Music 100 - Percussion.
Music 100 - Saxophone.
Music 100 - String Bass.
Music 100 - Trumpet.
Music 100 - Trombone.
Music 100 - Tuba.
Music 100 - Viola
Music 100 - Violin.
Music 100 - Violoncello.
Music 100 - Classical or Jazz Voice.

MUSIC 101
Performance Seminar.
Weekly performances by students faculty and guests. Participation required of all music majors. Attendance and performance in major area required.
0 semester hours

MUSIC 102
Concert Seminar.
Attendance at concerts and recitals. Required of all majors.
0 semester hours

MUSIC 109
Theory I.
A thorough exploration of music fundamentals: scales, modes, keys, triads, seventh chords, clefs, time signatures, musical terms, rhythmic concepts, and the principles of notation. Musical examples will be studied to foster an understanding of how these fundamentals are used.
3 semester hours

MUSIC 109A
Aural Theory I.
Development of aural recognition and singing. Includes intervals, scales, and triads in all forms.
1 semester hour

MUSIC 110
Theory II.
Counterpoint. Beginning with first species tonal counterpoint and progressing to four-part chorale textures, students will develop the skills of writing multiple musical lines according to standard practices. Musical examples from Palestrina and Bach will be studied.
3 semester hours

MUSIC 110A
Aural Theory II.
Continues the development of aural recognition and singing, emphasizing two-part music and all forms of triads and seventh chords.
1 semester hour

MUSIC 121
Music Appreciation.
A basic course in the elements of music and their historical application in Western music. Active listening and student participation is emphasized.
3 semester hours

MUSIC 201/202
Master Works of Music I, II.
Designed to increase musical understanding for majors and non-majors. Representative classical works for solo instruments

and ensembles are analyzed from live performances and recordings. Cultural, historical, and musical contexts are emphasized.
2 semester hours each

MUSIC 203
History of Western Music I.
The historical development of music and musical styles from ancient Greece to the end of the baroque era.
3 semesters hours

MUSIC 204
History of Western Music II.
The historical development of music and musical styles from the baroque era through succeeding classical, romantic and modern periods.
3 semester hours

MUSIC 205
Twentieth Century Music.
Emphasis on contemporary music and the diverse styles of the 20th century, the composers of the period, and the social, cultural, and philosophical trends which influence them. Prerequisite: Music 121 or Music 203/204, or permission of the instructor.
3 semester hours

MUSIC 207
The History of Jazz.
A study of the periods of jazz, jazz performers and composers, trends, influences, stylistic features, and related materials.
3 semester hours

MUSIC 208A / 208B
Jazz Improvisation of Repertoire I, II.
A beginning approach to jazz improvisation through the study of contemporary harmony. Lyrical style will be emphasized. Students analyze and transcribe solos. Prerequisites: Music 109-110.
3 semester hours

MUSIC 212
Studio Recording.
Introduction to the use of microphones, mixing consoles, digital and analog recorders in the university's recording studio. Labs include on-campus concerts.
2 semester hours

MUSIC 215
Theory III.
Harmony and Analysis. Introduction to the harmonic and formal practices of the seventeenth and eighteenth centuries in Western music. Examples from the repertoire studied. Continues the study of four-part writing.
3 semester hours

MUSIC 215A / 216A
Aural Theory III / IV.
Continues the development of aural recognition and solfege singing. Includes aural recognition of four-part music, cadences, and modulations.
1 semester hour each

MUSIC 216
Theory IV.
Harmony and Analysis. Introduction to the harmonic practices of the nineteenth and early twentieth centuries in Western music, with an emphasis on chromaticism and large scale formal considerations. Examples from the repertoire will be examined.
3 semester hours

MUSIC 220
Vocal Diction.
Study of the problems relating to singing in Italian, German, French and English. Specific application to the song and operatic literature.
3 semester hours

MUSIC 229
Instrumental Maintenance and Repair.
Aspects of maintenance and basic repairs of string, woodwind, and brass instruments are studied using project instruments supplied by the university.
3 semester hours

MUSIC 255
Group Piano.
A beginning course in the fundamentals of piano technique and playing. Simple pieces, scales, exercises and transposition.
2 semester hours

MUSIC 256
Keyboard Harmony.
Drills in harmonic progressions, simple cadences, diatonic and chromatic sequences. Progressions of primary and secondary chords and diatonic melodies.
2 semester hours

MUSIC 298
Piano Maintenance and Repair.
Aspects of piano tuning, regulation, maintenance and basic repairs are studied using project instruments supplied by the university.
3 semester hours

MUSIC 304A, 304B
Jazz Arranging I, II.
Beginning and intermediate study and application of modern techniques of writing for large and small jazz ensembles. Prerequisite Music 215 or permission of instructor.
3 semester hours each

MUSIC 311
Conducting I.
Emphasis in choral techniques and conducting choral ensembles.
3 semester hours

MUSIC 312
Conducting II.
Emphasis in instrumental techniques and conducting instrumental ensembles and orchestras.
3 semester hours

MUSIC 315
Introduction to Composition.
Free creative writing, applying the principles of form. Analysis of representative works from the repertoire. Instrumentation, orchestration, and notation are emphasized. Prerequisite: Music 216 or permission of instructor.
3 semester hours

MUSIC 398
Internship.
Professional, supervised, unpaid work experience in an organization related to career goals. Prerequisite: Permission of advisor and school director.
3 semester hours

MUSIC 399
Independent Study.
Specialized advanced projects in subjects not covered by course offerings. Conferences with designated Independent Study

advisor. Prerequisite: Permission of advisor and school director.
3 semester hours

MUSIC 414
Business of Music.
Emphasis on copyright, contracts, retail sales, private studio teaching, recording, and publishing.
2 semester hours

MUSIC 426
Computers in Music.
With an overview of basic computer terminology and how computers work, this course prepares students for commercially available application use by introducing them to several computer functions that are essential for musicians (music engraving, MIDI sequencing, desk-top publishing, and data bases).
3 semester hours

MUSIC 427
MIDI Performance.
Using MIDI (Musical Instrument Digital Interface) as a recording studio tool, students learn to configure personal computers and MIDI controllable devices (synthesizers, lighting systems, sound modules, and/or effects). Emphasis placed on the creative end result. Prerequisite: Music 212 and Music 426.
3 semester hours

Ensembles

MUSIC 103
Chorus.
Presentation of choral works from a variety of cultural and historical perspectives. Performances at university and community functions. All who enjoy singing are encouraged to enroll.
1 semester hour

MUSIC 105
Orchestra.
A university-community orchestra offering opportunity for public performance.
1 semester hour

MUSIC 107
Chamber Ensembles.
Chamber music ensembles studying and performing works from the repertoire. Prerequisite: Permission of instructor.
1 semester hour

Brass Ensemble - 107A
String Ensemble - 107B
World Music Ensemble - 107E
Chamber Singers - 107F
Early Music Ensemble - 107M
Accompanying 107P
Small Group Jazz Ensemble - 107R
(Each 1 semester hour)

MUSIC 112
Sinfonietta.
Performs a variety of works for instrumental ensemble. Meeting weekly, the Sinfonietta is featured at performances throughout the year.
1 semester hour

MUSIC 115
Concert Choir.
Limited to a balanced choral ensemble selected by audition during registration. Extensive performance opportunities with emphasis on traditional and contemporary choral literature. Membership on full-year basis only.
1 semester hour

Music Education

MUSIC EDUCATION 183
Group Instruction in Voice.
Instructing the future teacher in techniques of tone production, pitch, and modern effects used in choral singing, especially at the junior and senior high school levels.
2 semester hours

MUSIC EDUCATION 221
Group Instruction in Strings.
Designed to provide the future school music teacher with the necessary proficiency in string instrument teaching.
3 semester hours

MUSIC EDUCATION 223
Group Instruction in Woodwinds.
Designed to provide the future school music teacher with the necessary proficiency in woodwind instrument teaching.
3 semester hours

MUSIC EDUCATION 225
Group Instruction in Brass.
Designed to provide the future school music teacher with the necessary proficiency in brass instrument teaching.
3 semester hours

MUSIC EDUCATION 226
Group Instruction in Percussion.
Designed to provide the future school music teacher with the necessary proficiency in percussion instrument teaching.
3 semester hours

MUSIC EDUCATION 331
Literature and Techniques for Chorus.
A study of choral literature appropriate for the middle and high school levels. Includes techniques of voice testing, tone development, range, diction, and musicianship. Prerequisite: Mse 183 or permission of instructor.
3 semester hours

MUSIC EDUCATION 332
Literature and Techniques for Band and Orchestra.
Study of band and orchestra literature with emphasis on rehearsal techniques and problems related to band and orchestra organization. Prerequisite: Mse 221, 223, and 225
3 semester hours

MUSIC EDUCATION 336
Literature and Techniques for Jazz Ensemble.
Methods, materials, and rehearsal techniques in arranging for small and large jazz ensembles at the high school level. Prerequisite Music 304 or permission of instructor.
3 semester hours

MUSIC EDUCATION 343
Music in Elementary Schools.
Emphasizing procedures, materials, and problems of teaching music in grades one through six.
3 semester hours

MUSIC EDUCATION 380

Music in Secondary Schools.

Emphasizing procedures, materials, and problems of teaching music in secondary schools.

3 semester hours

MUSIC EDUCATION 399A

Independent Study.

Specialized advanced projects in subjects not covered by regular course offerings. Conferences with designated advisor. Prerequisite: permission of advisor and school director.

3 semester hours

Nutrition

NUTRITION 107

Basic Nutrition.

This is an introductory course in personal nutrition. The major and minor nutrients are studied within the context of deficiency requirements, function, characteristics and sources. Food and its components are discussed in relationship to growth, development, metabolism and energy.

2 semester hours

NUTRITION 123

Nutrition Seminar.

A seminar designed to provide students with the basic principles of nutrition. Topics include classes and sources of nutrients, energy intake and expenditure, dietary standards and guidelines, food labeling and food safety. Emphasis will be placed on the role of macronutrients in the diet.

2 full day weekend sessions;
1 semester hour

NUTRITION 204

Principles of Nutrition.

The principles of nutrition are presented with emphasis upon diet counseling and behavioral modification for the dental patient. The case method is used both in theory and practice to relate prevention and control of oral disease through nutritional status. Prerequisite: Chemistry 114.

2 semester hours

NUTRITION 205

Fundamentals of Nutrition.

The fundamentals of normal and therapeutic nutrition are presented. Attention is focused on the promotion of health, prevention of illness and the restoration of health following illness for injury. This course includes a self analysis of the participant's diet.

3 semester hours

NUTRITION 299

Independent Study.

Students examine specific nutritional topics of personal interest. Permission of instructor is required.

3-6 semester hours

Philosophy

PHILOSOPHY 101

General Philosophy.

A survey of the central problems of metaphysics, epistemology, and ethics. Topics include the existence of God, extreme skepticism, the relationship between mind and body, free will versus determinism, and freedom of expression. The course includes analysis of representative thinkers.

3 semester hours

PHILOSOPHY 103

Men, Women, Issues.

A discussion of gender differences and sex equality. The course critically examines topics such as sexual harassment, comparable worth, monogamous marriage, prostitution, and rape. These topics are examined from a variety of perspectives, including conservatism, liberal feminism, traditional Marxism, radical feminism, and the care and justice outlooks that Carol Gilligan has identified.

3 semester hours

PHILOSOPHY 104

Logic and Scientific Method.

Study of logical inference, both deductive and inductive. Analysis of propositions, arguments, fallacies, language, and the nature and functions of the methods of the sciences.

3 semester hours

PHILOSOPHY 203

Ethics.

A study of problems of applied ethics, such as abortion, animal experimentation, affirmative action, and gay and lesbian rights. These problems are explored from the standpoint of ethical theories such as utilitarianism and Kantian ethics.The course helps students formulate and interpret moral values by which they may think and act.

3 semester hours

PHILOSOPHY 205

History of Western Philosophy.

A survey of the historical development of philosophy from antiquity through the 19th Century, with weight given to the contributions of Greek philosophers and those of the Middle Ages and the Enlightenment. In the 19th Century, attention is given to the rationalist, idealist, and empiricist schools of thought and their influence.

3 semester hours

PHILOSOPHY 216

Philosophy of World Religions.

A comparison and analysis of the philosophical foundations of some of the world's major religions. Among the religions studied are: Judaism, Christianity, Islam, Hinduism, Buddhism, and Confucianism.

3 semester hours

PHILOSOPHY 323

Classics in Political Theory.

Analysis of principles of political theories of the Ancient Greek, Roman, Medieval, and Early Modern periods. Emphasis on the thought of Plato, Aristotle, the Stoics, St. Augustine, St. Thomas Aquinas, Machiavelli, Hobbes, Locke and Montesquieu. Application of these theories to contemporary political ideas and problems.

3 semester hours/Cross-listed with Political Science 323

PHILOSOPHY 324

Recent Political Theory.

An examination of a broad spectrum of recent world views, with particular attention paid to systems such as anarchism, Marxism-Leninism, and fascism. Other topics include Third World perspectives, black power, radical feminism, and futurism.

3 semester hours/Cross-listed with Political Science 324

PHILOSOPHY 340

Selected Topics in Philosophy.

Concentrated study of a major figure or theme that will supplement the offerings in the department.
3 semester hours

PHILOSOPHY 399

Independent Study.

For the student who wishes to specialize in advanced topics not covered by regular course offerings. Individual or small group conferences with designated advisor. Prerequisite: Permission of School Director.
3 semester hours

Physics

PHYSICS 101

Astronomy I — The Solar System.

The earth and the relation of its motions to time and the seasons. The moon, tides and eclipses. The nature and motions of the planets and their satellites, including findings of recent space probes. Asteroids, comets and meteors. The origin of the solar system.
2 lecture-discussion periods; 1 two-hour lab; 3 semester hours

PHYSICS 102

Astronomy II - Beyond the Solar System: Cosmology.

The motions and properties of stars. Nebulae and interstellar matter. Formation and evolution of stars; red giants and white dwarfs. Variable and exploding stars: novae and supernovae. Neutron stars and black holes. Double stars and clusters. Galaxies, quasars and the origin of the universe. Theories of the origin of the universe. Prospects of other solar systems containing inhabitable planets.
2 lecture-discussion periods; 1 two-hour lab; 3 semester hours

PHYSICS 103

Basic Concepts of Physics I.

Space and matter, particles in motion, Newtonian mechanics, atoms and heat, wave phenomena.
2 lectures; 1 two-hour lab; 3 semester hours

PHYSICS 104

Basic Concepts of Physics II.

Electricity and magnetism, relativity, and optics. The fundamental structure of matter.
2 lectures; 1 two-hour lab; 3 semester hours

PHYSICS 107

Principles of Physics I.

The principles of mechanics and their applications.Kinematics, Newtonian mechanics, conditions for equilibrium, statics, work, energy and conservation laws. Rotational waves. Simple harmonic motion; Co-requisite: Mathematics 110, or 111.
3 lectures; 1 three-hour lab;
4 semester hours

PHYSICS 108

Principles of Physics II.

Electric forces and fields, electrical potential, electric properties of matter. Magnetic forces and fields, charges in motion, magnetic properties of matter. Electromagnetic induction, Maxwell's equations. Wave motion, electromagnetic waves. Prerequisite: Physics 107; Co-requisite: Math 112.
3 lectures; 1 three-hour lab;
4 semester hours

PHYSICS 201

General Physics I.

A non-calculus course which presents an introduction to classical mechanics, heat and thermodynamics. Prerequisite: Mathematics C105 or its equivalent.
3 lectures; 1 three-hour lab;
4 semester hours

PHYSICS 202

General Physics II.

A non-calculus course covering the fundamental laws of electricity and magnetism, electric circuits, and optics, including topics from modern physics. Pre-requisites: Mathematics C105 or its equivalent, Physics 201 or its equivalent.
3 lectures; 1 three-hour lab;
4 semester hours

PHYSICS 209

Principles of Physics III.

Heat and heat transfer. The laws of thermodynamics, the kinetic theory of gases, and statistical mechanics. The laws of reflection and refraction of light. Lenses and mirrors. Interference, diffraction and polarization of light. The photon description of light. The wave description of electrons. The laboratory serves as an extension of the course lectures by introducing such topics as the photoelectric effect, atomic spectroscopy, and electron diffraction. Prerequisite: Physics 108; Co-requisite: Mathematics 215.
3 lecture periods; 1 three-hour lab;
4 semester hours

PHYSICS 304

Thermodynamics and Statistical Mechanics.

The zeroth, first, second, and third laws of thermodynamics with applications to physical phenomena. An introduction to statistical physics. Prerequisite: Physics 209; Co-requisite: Mathematics 215.
3 lectures; 3 semester hours

PHYSICS 305

Electricity and Magnetism I.

Electric charge, field, and potential. Electrostatic problems. Dielectric media. Electrostatic energy. Electric current. Prerequisite: Physics 209; Co-requisite: Mathematics 215 or 301.
3 lectures; 3 semester hours

PHYSICS 306

Electricity and Magnetism II.

Magnetic fields and magnetic properties of matter. Electromagnetic induction. Maxwell's equations and electromagnetic waves. Prerequisite: Physics 305.
3 lectures; 3 semester hours

PHYSICS 310

Atomic and Nuclear Physics.

The Schrodinger equation with applications to the barrier problems, spin, many electron atoms and molecules; special relativity; nuclear structure and the two nucleon problem. Prerequisite: Mathematics 215.
3 lectures; 3 semester hours

PHYSICS 312

Photonics.

The wave aspects of radiation and the =kinematics of wave motion giving rise to interference and diffraction, together with the interaction of electromagnetic waves and matter leading to such phenomena as reflection, dispersion, and polarization. Prerequisite: Physics 209; Co-requisite: Mathematics 215
3 lecture periods; 3 semester hours

PHYSICS 315
Quantum Mechanics I.
Formalism of quantum mechanics; angular momentum, perturbation theory, other approximation methods, and applications of quantum theory. Prerequisites: Mathematics 215 and Physics 209.
3 lectures periods; 3 semester hours;

PHYSICS 317
Analytical Mechanics I.
Elements of Newtonian mechanics. Motion of a particle, particles, and rigid bodies in one, two, and three dimensions. Prerequisite: Physics 209; Co-requisite: Mathematics 215.
3 lectures; 3 semester hours

PHYSICS 318
Analytical Mechanics II.
Lagrangian and Hamiltonian Mechanics, perturbation theory, central force fields, applications of vector and tensor analysis to nonlinear physical problems. Prerequisite: Physics 317.
3 lectures; 3 semester hours

PHYSICS 321
Techniques in Modern Physics.
Experimentation and Instrumentation. Undergraduate laboratory experiments in physics. Prerequisite: At least two physics courses numbered above 300.
1 three-hour lab; 1 semester hour

PHYSICS 322, 323, 324
Physics Laboratory.
Undergraduate laboratory experiments in physics. Prerequisite: At least two physics courses numbered above 300 and 321.
1 three-hour lab; 3 semester hours

PHYSICS 360
Selected Topics in Physics.
Selected topics in physics on specialized subjects beyond the scope of required courses to inform students of current areas of interest or to train students in special areas of physics.
3 semester hours

PHYSICS 390, 391
Physics Seminar.
Discussion of advanced and current topics in the field of physics. Students will make literature searches and present papers to the seminar in their areas of interest.
2 semester hours

Political Science

POLITICAL SCIENCE 101
American Government.
The Constitution. Structure and function of the national government: proper citizenship, civil rights, elections, and party organizations.
3 semester hours

POLITICAL SCIENCE 103
Introduction to Political Science: Political Life and Social Change.
Classical and modern concepts of politics. The organization of power, authority and legitimacy; types of political systems, Western and non-Western; problems of international relations; methods of political analysis.
3 semester hours

POLITICAL SCIENCE 204
Government and Politics Abroad.
Principal institutions, methods, and problems of government of selected foreign countries in Europe, Asia, Africa, and Latin America as compared with the American System.
3 semester hours

POLITICAL SCIENCE 206
Politics of the Third World.
An examination of the governments and political problems in Third World countries, including their politics and geographic backgrounds, problems of nation- building development, independence, and foreign politics. The role of Third World in the United Nations and relationships with the major powers, particularly the U.S., the C.I.S. and People's Republic of China are examined.
3 semester hours

POLITICAL SCIENCE 207
World Politics.
This course explores the principal elements of world politics, examining the context in which the major actors play their roles, as well as the salient features of the international community. It will review the most significant aspects of global politics by examining such topics as foreign policy, the nature of national power, and war. It will examine the origin, organization, and function of the major international institutions, and conclude with a discussion of global issues.
3 semester hours

POLITICAL SCIENCE 208
Introduction to International Law.
History and nature of international law, territorial sovereignty, natural resources and international norms (e.g. exclusive economic zones, the continental shelf, outer space, etc.), diplomatic & consular relations, International Court of Justice and other tribunals, and the use of force in international law.
3 semester hours

POLITICAL SCIENCE 209
Introduction to United Nations Studies.
Examination of the successes and failures of the United Nations, its prospects for the future, principal organs, especially the Security Council, budgetary system, role in arms control, relations between the United Nations and the United States, and related issues.
3 semester hours

POLITICAL SCIENCE 215
International Human Rights.
A study of the international protection of human rights. The course analyzes the origin and nature of human rights, the content of human rights standards guaranteed by international law, as well as the global international mechanism for the protection of human rights. It includes a comparative examination of the regional systems in Europe, the Americas, Asia, and Africa for the protection of human rights.
3 semester hours

POLITICAL SCIENCE 299
Selected Topics in Political Science.
A course with variable topic focus, dependent upon student needs and the expertise of the instructor.
3 semester hours

POLITICAL SCIENCE 304
American Political Parties.
A survey of the party process in the United

States with special reference to the problems of party organizations, politicians, the spoils system, the nominating process, political campaigns, the primary system.
3 semester hours

POLITICAL SCIENCE 305
International Relations.
Introduction to power politics. The political, social, and economic forces — nationalistic, imperialistic, and internationalistic — underlying current world problems. Special attention to the ideological and realistic operations of foreign policies of the major nations.
3 semester hours

POLITICAL SCIENCE 314
Government of Russia.
Government and politics of Russia since 1917. Reference to Soviet foreign policy and relationships with the Communist movement in other countries.
3 semester hours

POLITICAL SCIENCE 323
Classics in Political Theory.
Analysis of principles of political theories of the Ancient Greek, Roman, Medieval, and Early Modern periods. Emphasis on the thought of Plato, Aristotle, the Stoics, St. Augustine, St. Thomas Aquinas, Machiavelli, Hobbes, Locke and Montesquieu. Application of these theories to contemporary political ideas and problems.
3 semester hours/Cross-listed with Philosophy 323

POLITICAL SCIENCE 324
Recent Political Theory.
Analysis of the major contemporary ideologies, their historical-philosophical backgrounds and public policy implications. Among the ideologies and belief systems considered are liberalism, conservatism, Marxism (including Leninism and Maoism), fascism, anarchism, religious fundamentalism, and feminism. The cultural expressions of these ideologies in arts and literature are also examined.
3 semester hours/Cross-listed with Philosophy 324

POLITICAL SCIENCE 398
Internship.
Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.
3 semester hours.

POLITICAL SCIENCE 399
Independent Studies.
This course permits the advanced political science student to undertake individual research in the area approved by the instructor. Continuous consultation with the instructor is required. Prerequisite: Permission of School Director.
1-6 semester hours

Psychology

PSYCHOLOGY 201
Human Growth and Development I.
This course is an interdisciplinary study of the development and behavior of the human being from conception to pubescence within the physical and social setting. The content is derived principally from anthropology, biology, pediatrics, philosophy, psychology, sociology and field studies.
3 semester hours

PSYCHOLOGY 202
Human Growth and Development II.
This course is an interdisciplinary study of the development and behavior of the human being from pubescence to adulthood within one's physical and social setting. The content is derived principally from anthropology, biology, philosophy, psychology, sociology, and field studies.
3 semester hours

PSYCHOLOGY 103
Introduction to Psychology: Social and Behavioral Foundations.
An introduction to the field of psychology emphasizing the topics of human development, intelligence, abnormality and its treatment, motivation, and social psychology.

Course content is taught by psychology faculty using a variety of methods including lectures, discussion groups, self-paced testing, essay writing, and computer assisted instruction. The methods used in a specific section will vary.
3 semester hours

PSYCHOLOGY 301
Psychological Statistics.
Descriptive and inferential statistics used in psychological research; binomial and normal distributions, chi-square, t-test, correlation and regression, simple and complex analysis of variance, use of calculators and computers. Prerequisites: Mathematics Competency, Psychology 103 and permission of faculty teaching course.
3 semester hours

PSYCHOLOGY 303
Psychology of Personality.
The dynamics of personality development, with emphasis on the normal personality. Major personality theories and their implications for understanding deviant behavior.
3 semester hours

PSYCHOLOGY 304
Abnormal Psychology.
The study of those thoughts, feelings and behaviors that interfere with psychologically adaptive functioning. Discussion includes contemporary issues and such traditional disorders as neurosis, psychosis, personality disorders, adjustment reactions—the causes and appropriate treatment approaches. Prerequisite: Psychology 103.
3 semester hours

PSYCHOLOGY 305
Social Psychology.
Scientific study of social influences on behavior of the individual. Topics include attitude change, social perception, altruism, aggression, conformity, leadership, conflict, and environmental psychology.
3 semester hours

PSYCHOLOGY 306
Psychology of Perception.
How do we construct a representation of physical reality from sensory experience, particularly sight and sound? What is the physiological basis of perception, illusions, hallucinations and dreams? The course will introduce the student to a new theory of the integrative activity of the brain based on electrophysiological, pathological, and experimental studies of the perceptual constancies and disorders of perception. Prerequisite: Psychology 103.
3 semester hours

PSYCHOLOGY 307

Cognitive Processes.

Examination of recent advances in our understanding of thought processes. Coverage of theoretical and practical aspects of such topics as attention, memory, problem solving, and intelligence. Prerequisite: Psychology 103.
3 semester hour

PSYCHOLOGY 309

Industrial and Organizational Psychology.

Application of psychological principles to organizational systems which include industry, business, transportation, communications, institutions, consumer behavior, etc. Also covered are: systems analysis, development of skills, training, accident prevention, fatigue, and monotony. Attitudes and motivations of workers and consumers. Prerequisite: Psychology 103.
3 semester hours

PSYCHOLOGY 310

Psychological Aspects of Sexual Behavior.

Psychological and physiological components of human sexuality, and their interaction. An attempt is made to enable students to understand and accept their own sexual behavior and to acquaint them with attitudes and behavior which might differ from their own. Provides a background from which future educators can provide answers to the questions about human sexuality frequently encountered in an educational setting. Prerequisite: Psychology 103.
3 semester hours

PSYCHOLOGY 314

Educational Psychology.

This course concentrates on the application to the teaching-learning process of psychological concepts, principles, theory and research results. It examines issues of growth and development, adjustment and personality, learning, measurement and evaluation. This course meets teacher requirements for psychological foundations.
3 semester hours

PSYCHOLOGY 315

History of Psychology.

Traces the development of modern psychology from its roots in philosophy and science. Examines such major approaches of the twentieth century as functionalism, behaviorism, psychoanalysis, and information-processing. Identifies some emerging models for the 21st Century. Prerequisite: Psychology 103.
3 semester hours

PSYCHOLOGY 316

Current Problems in Psychology.

In depth examination of some major topic in contemporary psychology. Prerequisite: Psychology 315.
3 semester hours

PSYCHOLOGY 321

Experimental Psychology I.

Design and analysis of psychological research. Group and individual experimentation. Prerequisites: Psychology 103 and Psychology 301.
3 semester hours

PSYCHOLOGY 323

Human Assessment: Potential and Performance.

Standardized psychological tests and measurements and their application to psychological, educational, and industrial settings. Prerequisites: Psychology 103 and Psychology 301.
3 semester hours

PSYCHOLOGY 330

Psychology of Middle and Old Age.

Theoretical orientations to aging; changes over age in biological systems, sensation-perception, psychomotor skills, intellectual functioning and learning, and personality. Psychopathology of aging. Life review, reminiscing, dying, and death. Planning and designing for the welfare of the aged. Prerequisite: Psychology 103.
3 semester hours

PSYCHOLOGY 333

Exceptional Children.

The undergraduate course is designed for those students interested in the care and treatment of exceptional children or those who might enter the field of special education. It is designed to inform students about the major categories of exceptional children, their identifying characteristics, and programs available to meet their "special needs." Prerequisite: Psychology 103.
3 semester hours

PSYCHOLOGY 345

Health Psychology.

Health psychology provides psychology's contribution to the interdisciplinary field of behavioral medicine. The course will examine implications of the mind-body interaction for understanding the effects of stress, the seeking of medical treatment, and the promotion of healthier living. It will also address the ways in which professionals can understand and modify behavioral sources of illness, and thereby lessen peoples' suffering, increase their life expectancy, and improve their quality of life.
3 semester hours

PSYCHOLOGY 348

Psychology of Women.

An examination of major theories and concepts of the psychology of gender including classic and contemporary research on gender roles, stereotyping and discrimination. The course will explore sex differences in development with special attention to relationships, violence, childbearing, motherhood, and the world of work. Emphasis is on students developing their own perspectives on gender-related issues.
3 semester hours

PSYCHOLOGY 380

Physiological Psychology.

The physiological mechanisms underlying human behavior. The sensory, neural endocrine, and response systems discussed within the broader framework of psychological functioning involving sensation, perception, emotional response, learning, thinking, motivation, and personality. Prerequisite: Psychology 103
3 semester hours.

PSYCHOLOGY 381

Drug Effects and Behavior.

Fundamentals of psychopharmacological research with emphasis on human drug-taking behavior. A discussion of the various psychoactive drugs and implications of their use. Prerequisite: Psychology 103.
3 periods; 3 semester hours

PSYCHOLOGY 399A

Individual Study in Psychology.

An opportunity to study topics not covered in regular course offerings or to carry out

an individualized course of instruction. Prerequisites: Psychology 103 and permission of School Director.
1-6 semester hours

PSYCHOLOGY 399B
Child Psychopathology.
Introduction to psychological disorders in children. Attention is given to the nature of different disorders, theories of causation, and treatment approaches such as play therapy, behavior modification, family therapy, etc. Prerequisite: Psychology 103; Psychology 304 recommended but not required
3 semester hours

PSYCHOLOGY 400
Environmental Psychology.
An intensive interdisciplinary study of man-environment transactions. Special emphasis is given to environmental problem areas, e.g., overcrowding, pollution, the design and utilization of space, and their impact upon man's perceptual, conceptual, and cognitive behavior. Topics covered include major problems, methods of observation and analysis, and empirical and theoretical contributions from various disciplines. Prerequisites: Psychology 103 and permission of faculty.
3 semester hours

PSYCHOLOGY 402
Psychology of Marriage and the Family.
The dynamics of marriage and family are explored from a psychological perspective. We will study such issues as how and why marital partners are chosen, marital sexuality, stages that a marriage and family undergo, parenting concerns, the nature of love, blended families, cohabitation and other alternatives to traditional family designs. Prerequisite: Psychology 103.
3 semester hours

PSYCHOLOGY 405
Group Dynamics.
Students study interpersonal and small group behavior by being actively involved in groups. Issues to be experienced and explored include: dynamic forces which facilitate or impede effective group functioning; styles of leadership, stages of group development; the dynamics of conscious and unconscious assumptions and expectations on group behavior; the significance of roles and intragroup conflict issues, and decision-making and problem-solving methods and skill application. Prerequisite: Psychology 103.
3 semester hours

PSYCHOLOGY 407
Psychology of Consciousness.
Presentation of recent developments in the study of consciousness. Topics include sleep and dreams, meditation, music, and biofeedback. The ancient system of yoga is examined in terms of modern information-processing concepts. Prerequisite: Psychology 103.
3 semester hours

Retailing

RETAILING 102
Merchandising Mathematics.
A functional and realistic approach to retailing principles and operations by the application of mathematical formulas and procedures. Emphasis on income statements, pricing techniques, markup, markdown, sales volume, inventory control, merchandising terminology, and merchandising planning. Math placement test must be taken.
3 periods, 3 semester hours
Required: A grade of at least a "C" to enter Retailing 204

RETAILING 180
Seminar in Professional Development.
Surveys retail and related career areas, entry requirements and employment opportunities. Students are provided with opportunities to develop pertinent retailing related resumes, professional portfolios and interview techniques, as well as letters of application. Detailed study of current job market, and business ethics.
2 semester hours

RETAILING 201
Retail Advertising and Fashion Promotion I.
Principles and methods of advertising and promotion for producers, manufactures and retailers with emphasis on the retailers most often used media — the newspaper. Varying advertising approaches of the mass merchandiser, the prestigious department store and the specialty store are included. Additionally, students work on individual or group assignments in special events planning, visual merchandise, direct marketing, publicity, newspaper and magazine advertising. The role of the retail buyer and product developer in the advertising function in the planning and budgeting of ads is also included.
3 periods; 3 semester hours

RETAILING 202
Retail Advertising and Fashion Promotion II.
A continuing study of retail sales promotion with emphasis on broadcast, special event planning and visual merchandising. Direct marketing, publicity and magazine advertising are also covered. Student prepares a commercial videotape, a model window or interior display and a special event promotion portfolio. Prerequisite: Retailing 201.
3 periods; 3 semester hours

RETAILING 203
Fashion and Retail Buying I.
The study of buying theory and techniques for department stores and speciality retailers. Analyzes the buying function and examines how buyers' responsibilities vary in different types of merchandizing organizations. Studies the principles, procedures, and techniques practiced by merchandisers of fashion goods in determining resources to select and assortments to buy.
3 semester hours

RETAILING 204
Fashion and Retail Buying II.
Inventory and stock control procedures, analysis of consumer demand in the buying and marketing of fashion products. Six month budget planning of sales, goods, and promotional activities. Spreadsheets and computer applications are used to plan, analyze, and adjust retailing activities. Practice in buying from a variety of domestic and international resources, including the development of private label products. Prerequisite: Retailing 102 with a grade of "C"or better.
3 semester hours

RETAILING 205
Textiles I.
Basic concepts of textiles dealing with fibers, yarns and methods of fabric

construction; consumer education and consumer protection through imposed and voluntary trade regulations concerned with the marketing of textile products; special emphasis on the growth of synthetic fibers, their value and characteristics. Specific laboratory assignments devoted to natural and synthetic fiber identification and testing. $10 lab fee.
3 periods; 3 semester hours

RETAILING 206
Textiles II.
Continuation of textile concepts including the study of films, foams, laminated fabrics, fiberwebs, knitted constructions, flocked fabrics, and laces. In depth study of fashion and home furnishing products with emphasis on performance for use. Functional and aesthetic fabric finishes are assessed through laboratory work applying industry standards. Prerequisite: Retailing 205. $15 laboratory fee.
3 semster hours

RETAILING 207
Strategies of Selling.
Development of professional selling techniques necessary for efficiency and success in all phases of retailing and wholesaling. Expertise in a retail product line is developed through a product research project.
3 periods; 3 semester hours

RETAILING 213
Retail Human Resource Management I.
An examination of personnel management within retail organizations. Topics include a survey of personnel theories and practices, and labor legislation in regard to personnel functions. Emphasis is on the special problems encountered by retailers with respect to employee recruitment, training, placement, scheduling, satisfaction, turnover, evaluation, and executive development.
3 semester hours

RETAILING 280
Industry Internship.
Paid work experience in a faculty-approved retail organization. Six week full-time on-the-job assignment combined with written research into corporate structure and marketing strategy. Holiday selling season of sophomore year. Prerequisite: 2.5 Q.P.R. Student must maintain 2.5 Q.P.R. during the internship semester. Fashion Merchandising and Retailing majors only.
3 semester hours

RETAILING 300
Mass Merchandising Marketing.
An analytical study of national and multinational mass merchandising organizations that include origin, concepts, operations, technology, and profitability. Comparision of in-store mass merchandisers, catalog retailers, on-air merchandisers and on-line marketers. Students research a mass merchandiser of their choice in depth. Prerequisites: Retailing 201, 204, 207 and 213; open only to juniors, seniors only.
3 periods; 3 semester hours

RETAILING 307
Surface Design I.
Introduction to the business of Textile Surface Design. Course focus is on applied surface designs using natural and geometric motifs as they apply in a variety of fashion markets including infant's and children's, women's, men's, domestics and paper goods. Students research current market design and color trends. Using classic, modern, or ethnic motif students work with layout, repeat size and colorways. Prerequisites: Retailing 205, 206, Art 103, 104. May be used as part of the textile specialization or as a free elective. $15.00 lab fee.
3 periods; 3 semester hours

RETAILING 308
Advanced Textiles.
A study of the history of textiles and of current material resources, production, distribution, marketing techniques and consumption in the textile and apparel industries and their interrelationships.
Prerequisites: Retailing 205, 206
3 periods; 3 semester hours

RETAILING 313
Retail Management II.
A study of the management decisions faced by the retail executive in today's marketplace. Topics include locations, retail store layout, security, the customer service mix, retail credit arrangements and their cost-benefit relationships. Human resource concerns include recruitment, personnel changes, retraining and layoffs; employee benefits and their impact on both morale and budgets. Students research in-depth one of the ten top retailers for practical solutions to a profitable retail environment. Students conduct a professional recruitment program for fashion industry leaders and current graduates. Prerequisite: Retailing 213, Retailing 202, and Marketing 305; junior and seniors majors only. **May not be taken same semester as Fashion Merchandising 270.**
3 periods; 3 semester hours

RETAILING 330
International Fashion Marketing.
An examination of international trade for textile and apparel industries. This course studies supporting agencies, foreign manufacturing, distribution, financing, transporation, tariffs and customs regulation. The student will be required to research exporting or importing a product and to prepare both a written and oral presentation. Prerequisites: Completion of Work Study Internship; Fashion Merchandising 101, 107, 108 and Retailing 203.
3 periods, 3 semester hours

RETAILING 399
Independent Study in Fashion Merchandising, Textiles or Related Retailing Techniques.
Independent study in fashion merchandising, textiles or related retailing techniques. Prerequisite: B.S. Degree Fashion Merchandising and Retailing seniors only; permission of chair. A three-credit internship is possible which combines one-credit of work experience with two-credits of independent research.
1-3 credits

Science

SCIENCE 101
Our Environment: The Earth.
The scientific examination of our planet focusing on the interaction of astronomy, biology, chemistry, geology, and physics, in the formation, evolution, and dynamics of the Earth.
2 lecture periods; 1 two-hour laboratory; 3 semester hours

SCIENCE 102

Humans and the Environment.

A scientific examination of the human organism and the interactions between humans and the environment as they affect not only humans but also the health and viability of home planet Earth.
2 lecture periods; 1 two-hour laboratory; 3 semester hours

SCIENCE C201

Our Environment: The Oceans

The scientific examination of the geological, physical, chemical, and biological characteristics of the oceans. The course will include laboratory and field studies of local marine environments.Prerequisite: Science C101 or C102 or an equivalent course.
2 lecture periods; 1 three-hour laboratory; 3 semester hours

Social Sciences

SOCIAL SCIENCES C201

Introduction to the Social Sciences I.

A survey of the development of the social sciences, how they were shaped by historical forces, and their role in understanding society. The emergence of economics, anthropology, sociology, psychology, and political science from social philosophy. Prerequisite: sophomore standing.
3 semester hours. A Core Heritage Course.

SOCIAL SCIENCES C202

Introduction to the Social Sciences II.

A continuation of the survey of the historical development of the social sciences. Students are given the foundation necessary for understanding the current social science literature and the social issues it addresses.
3 semester hours. A Core Heritage Course.

SOCIAL SCIENCES 206

Sophomore Seminar.

An interdisciplinary and thematic seminar in which two or more societies are studied from the perspectives of the social sciences. Students will learn how to research and write a paper of medium length on a topic related to the social sciences. Prerequisite: Any two social science courses. Required of Social Sciences majors in the sophomore year.
3 semester hours

SOCIAL SCIENCES 207

World Regional Geography.

A survey of world physical and human geographic patterns. Each world region will be analyzed in terms of its environment and resource distributions, agricultural systems and rural development, population growth and characteristics, and patterns of urbanization and industrial growth Considerable emphasis will be placed on the non-Western world, issues of sustainable development., and the changing nature of geography. Students will be required to write one research paper on a particular world region of their choice.
3 semester hours

SOCIAL SCIENCES 300

Seminar in Social Science Methods.

An introduction to the methods of research and criticism employed in history, economics, anthropology, sociology, psychology, and political science. Social Sciences majors will gain experience in both statistical and interpretative methods that will be useful for their senior thesis. PC access required. Prerequisite: Sophomore standing. Required of Social Sciences majors in the junior year.
3 semester hours

SOCIAL SCIENCES 395A & 395B

Senior Thesis.

Students work individually with their advisors, preferably starting in the second semester of the junior year, to research and write a thesis on a topic related to the social sciences. This topic may be the extension of an idea first developed in the Seminar on Social Science Methods. Prerequisite: Social Sciences 300. Required of Social Science majors in the senior year. Offered over two semesters.
6 semester hours

SOCIAL SCIENCES 398

Internship.

Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.
3 semester hours

SOCIAL SCIENCES 399

Independent Study.

For the student who wishes to specialize in advanced projects not covered by regular course offerings. Individual or small group conferences with designated advisor. Prerequisite: Permission of advisor and School Director.
1-6 semester hours

Sociology

SOCIOLOGY 101

Principles of Sociology.

Fundamentals of sociological study. Concepts, logic, and methods of sociology. Social interaction and social change in groups, institutions, and society.
3 semester hours

SOCIOLOGY 102

Sociology of Social Problems.

Analysis of major problems in modern society; existing methods for dealing with these problems.
3 semester hours

SOCIOLOGY 204

Marriage and the Family.

Courtship, marriage patterns, social sexual adjustment. Social interaction within the family. The family and society.
3 semester hours

SOCIOLOGY 231

Cultural Anthropology.

Origins and growth of culture. Pattern of culture as related to personality and social structure. Comparative cultures.
3 semester hours

SOCIOLOGY 299

Selected Topics in Sociology.

A course with variable topic focus; dependent upon student needs and the expertise of the instructor.

SOCIOLOGY 310

Race and Ethnicity.

Racial and ethnic stratification; causes and consequences of prejudice and discrimination; problems of assimilation and

pluralism; racial and ethnic conflict in the U.S. and in other societies.
3 semester hours

SOCIOLOGY 311
Juvenile Delinquency.
Analysis of delinquency causation, methods of treating delinquents, juvenile court procedures, interrelationship of police and youth, and problems of prevention.
3 semester hours

SOCIOLOGY 315
Criminology.
A critical examination of the conditions under which crime and delinquency occur. Theories of crime and punishment. Treatment of offenders.
3 semester hours

SOCIOLOGY 316
White Collar Crime.
Examines violations of law committed by persons or groups in the course of an otherwise respected and legitimate occupational or financial activity. History and types of white collar crimes are reviewed. Societal responses through legislation, regulatory and enforcement activities are covered. Sociological theories are utilized to provide a framework for explanation and focus of study. Selected case studies of crime in the public and private sector are presented and discussed, such as: fraud, deception, unfair competition, commercial and political bribery, influence peddling, violations of civil liberties, conflict of interest and crime in professions.
3 semester hours

SOCIOLOGY 348
Religion & Society
A sociological and anthropological analysis of religion as a universal social institution, with emphasis upon theories of the origins of religion, relationships of religion to other social institutions, study of selected Western and non-Western religions in their socio-cultural contexts, religion as a source of social equilibrium and conflict, types of religious movements.
3 semester hours

SOCIOLOGY 399
Independent Study.
For the student who wishes to specialize in advanced projects not covered by regular course offerings. Individual or small group conferences with designated advisor. Prerequisite: Permission of advisor and School Director.
1-6 semester hours

Spanish

SPANISH 101
Elementary Spanish I.
Introduction to Spanish, stressing pronunciation, aural comprehension, and basic conversation. The fundamental principles of grammar. Training in reading comprehension and writing.
3 semester hours

SPANISH 102
Elementary Spanish II.
Continuation of Spanish 101. Prerequisite: Spanish 101.
3 semester hours

SPANISH 103
Intermediate Spanish I.
Conversation based on the reading of modern prose texts. Drill in written and oral self-expression. A review of the principles of grammar. Prerequisite: Spanish 102 or two years of high school Spanish.
3 semester hours

SPANISH 104
Intermediate Spanish II.
Continuation of Spanish 103. Prerequisite: Spanish 103 or three years of high school Spanish.
3 semester hours

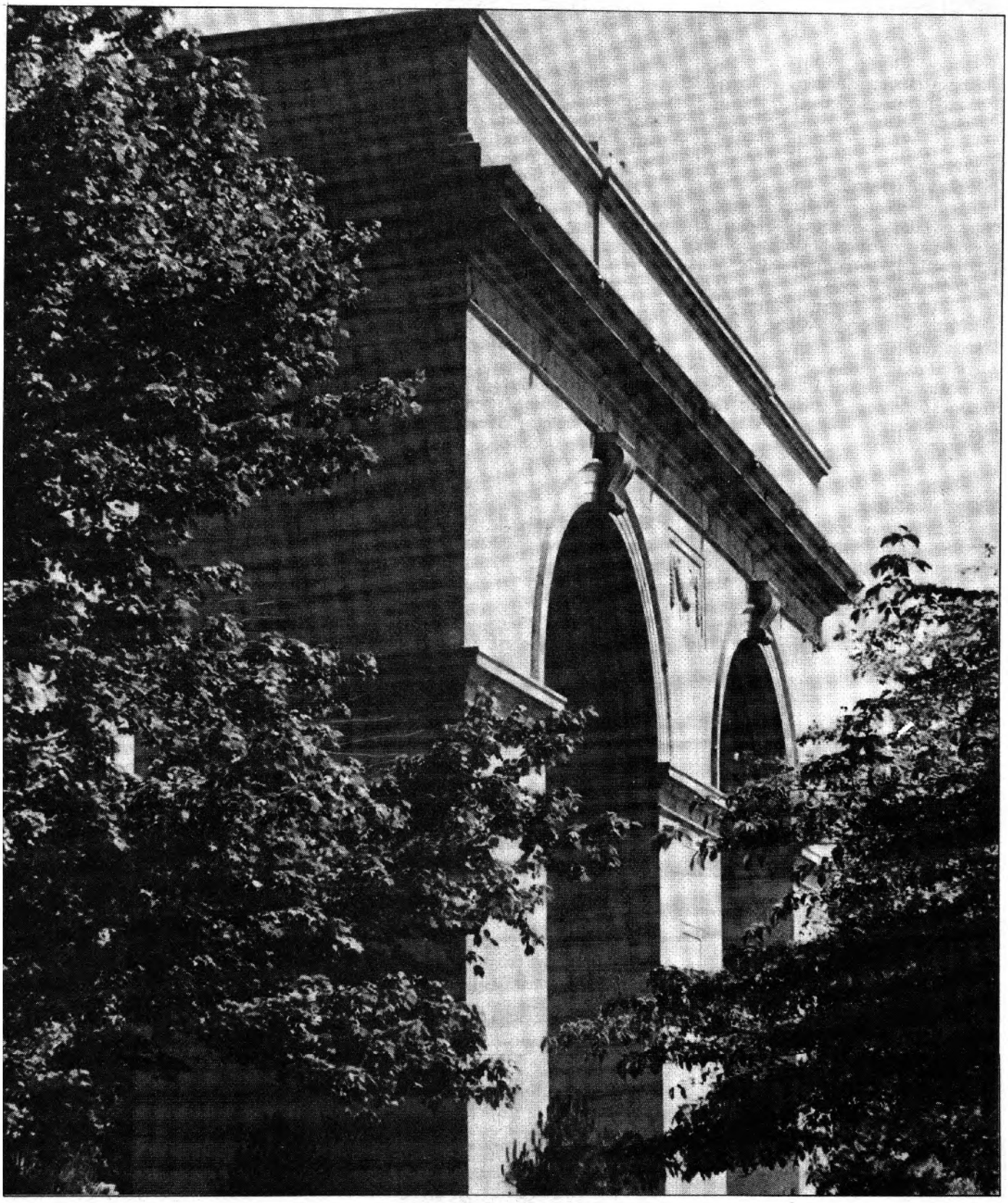
SPANISH 275
Topics in Spanish Language and Literature.
A reading seminar using literary works of representative authors, dramatists, poets, and others. Discussion of language problems amongst speakers of Spanish. The course may be given in Spanish only or a mix of Spanish and English, according to student needs. Prerequisite: If given in Spanish, Spanish 104.
3 semester hours

SPANISH 398
Internship.
Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.
3 semester hours

SPANISH 399
Individual Study.
Special projects on topics not studied in detail in regular courses, or projects on topics included in regular courses when those courses are not available. Prerequisite: Permission of School Director.
1-6 semester hours

Theatre

THEATRE 103
Introduction to Theatre.
The art of the theatre: its literature, structure, and aesthetics. Contributions of the playwright, actor, architect, director, designer, and producer are examined through lectures, presentations by visiting artists, class discussion, projects, and attendance at theatrical performances.
3 semester hours



Graduate Courses of Instruction

Graduate courses are offered at two levels. Courses at the 400 level are open to graduate students and to a limited number of qualified undergraduates; 500-level courses are open, in most cases, to graduate students only. For the convenience of graduate students involved in daytime professional work, most courses are scheduled Monday through Thursday between 4 and 10 p.m.; both 400- and 500-level courses meet either for a single 100-minute period or for two regular 75-minute periods, depending upon the nature of the course and the policy of the department. These policies do not apply to the College of Chiropractic, the College of Naturopathy, or the Nutrition Institute.

Some graduate courses are offered every year, but many are scheduled over a two-year or three-year cycle. It is, therefore, essential that graduate students should carefully plan entire programs with their graduate advisors so that they will be able to register for all required courses over the time span in which they expect to complete the degree. The University reserves the right to limit the number of students registered in any graduate course, and also the right to cancel any course for which there is insufficient enrollment.

Chiropractic

Anatomy

ANATOMY 511

Histology.

This course is designed to provide the chiropractic student with an understanding of microscopic human anatomy and its relationship at the cellular, tissue and organ level. A strong emphasis is placed on the association between histological structure and function of the skeletal, muscular and nervous systems.
3 lecture hours, 2 laboratory hours, 4 semester hours

ANATOMY 512

Functional Anatomy and Biomechanics I: Spine.

This course addresses the functional anatomy and biomechanics of the spinal column, ribs, and pelvis. Emphasis is placed on the interrelationships between the structure and function of the spinal column and its surrounding anatomical structures. Biomechanical principles are incorporated into functional anatomy of a dynamic human musculoskeletal system. Instruction includes lecture, dissection, tutorials, prosection and models.
3 lecture hours, 4 laboratory hours, 5 semester hours

ANATOMY 513

General Anatomy I: Viscera.

This courses focuses on the anatomy of the organs plus the walls of the human thoracic and abdominopelvic cavities. The neurological and vascular relationships of these organs are discussed with emphasis on the clinical applications. Instruction includes lectures and laboratory with dissection and prosection, osseous structures and models.
3 lecture hours, 3 laboratory hours, 4.5 semester hours

ANATOMY 525

General Anatomy II: Head and Neck.

This course focuses on the anatomy of the head, including the gross anatomy of the brain and special sense organs, and neck. The neurological and vascular relationships of these regions are discussed with emphasis on clinical applications. Instruction includes lectures, laboratory dissection and prosection, and models. Prerequisites: AN511, AN512, AN514.
3 lecture hours, 3 laboratory hours, 4.5 semester hours

ANATOMY 526

Functional Anatomy and Biomechanics II: Extremities.

This course is a study of the structure, function, biomechanics and clinical integration of the appendicular system. Presentations include the anatomy of the upper and lower extremity, joint mechanics, muscle kinetics, and gait analysis. Instruction includes dissection, prosection, case study, models, and group tutorials. Prerequisites: AN511, AN513, AN514, Co-requisite CH522.
3 lecture hours, 4 laboratory hours, 5 semester hours

ANATOMY 514

Embryology I.

Embryology covers the gametogenesis, fertilization, structural development from the zygote to birth. This course correlates the embryological development with other courses offered in semester I. Normal development, clinical correlations and common congenital abnormalities are presented. Emphasis is placed on the skeletal, muscular and nervous systems.
1 lecture hour, 1 semester hour

ANATOMY 527

Embryology II.

This course is a continuation of AN514, Embryology I. This course correlates the embryological development with anatomy courses offered in semester II. Prerequisite AN514.
1 lecture hour, 1 semester hour

Biochemistry

BIOCHEMISTRY 511

Biochemistry, Metabolism, and Nutrition.

This course is designed to provide the student with an understanding of the biochemical principles involved in maintaining functional integrity of the body through energetics and the principles involved in nutritional balance.
3 lecture hours, 2 laboratory hours, 4 semester hours

Business Procedures

BUSINESS PROCEDURES 811

Hospital Procedures, Insurance and Office Management.

Students are taught the current procedural practices for the handling of insurance matters and the operation of an office. Students are also introduced to procedures and protocols used in hospital settings. Prerequisites: all courses semesters I-VII.
2 lecture hours, 2 semester hours

BUSINESS PROCEDURE 812

Small Business Management.

This course introduces the student to the

business procedures and practices used in the successful operating of a business. Prerequisite: all courses semesters I-VII.
2 lecture hours, 2 semester hours

Chiropractic Skills and Technique

CHIROPRACTIC SKILLS AND TECHNIQUE 511
Chiropractic Examination Skills I: Palpation.
This lecture and laboratory course addresses the biomechanics and chiropractic assessment procedures of the spinal and pelvic joints. The student is introduced to the concepts of biomechanics as they relate to the kinematics and kinetics of the spine and pelvis and the strucure and functioning of the tissues of the musculosketal system. This information is coupled with the diagnostic tools of static and motion palpation as they pertain to the assessment of spinal joint functioning.
1 lecture hour, 2 laboratory hours, 2 semester hours

CHIROPRACTIC SKILLS AND TECHNIQUES 522
Chiropractic Examination Skills II: Palpation.
This course is a continuation of CH511. Students continue to develop their skills of spinal assessment. Students are also intoduced to the biomechanics and assessment procedures related to the extremities. Methods of spinal, soft tissue, and extremity assessment are reviewed and practiced. Prerequisites: CH511, AN512; Co-requisite AN526.
1 lecture hour, 4 laboratory hours, 3 semester hours

TECHNIQUE 611
Technique Procedures: Soft Tissue.
Students are introduced to the concepts of soft tissue diagnostic and treatment procedures. Differential diagnosis and case management of soft tissue lesions are presented.
2 lecture hours, 2 laboratory hours, 3 semester hours

TECHNIQUE 612
Technique Procedures: Full Spine Assessment and Manipulative Procedures.
This course introduces students to full spine adjustive procedures from occiput to the pelvis. The course begins with a review of biomechanics and assessment procedures presented in Technique 511 and 522. Selected spinal conditions are presented and discussed as it pertains to diagnosis, differential diagnosis and case management.
2 lecture hours, 2 laboratory hours, 3 semester credits

TECHNIQUE 623
Technique Procedures: Full Spine and Extremity Assessment and Manipulative Procedures.
This course is a continuation of Technique 612. Students continue to refine their assessment and adjustive skills and are introduced to additional adjusting procedures. Students are also introduced to extremity adjustive procedures. Selected spinal and extremity conditions are presented.
2 lecture hours, 4 laboratory hours, 4 semester hours

TECHNIQUE 714
Technique Procedures: Full Spine and Extremity Assessment and Manipulative Procedures.
Full spine and extremity assessment and adjustive procedures continue to be presented and practiced. Case management and differential diagnosis of various conditions are presented.
2 lecture hours, 4 laboratory hours, 4 semester hours

TECHNIQUE 725
Technique Procedures: Full Spine and Extremity Assessment and Manipulative Procedures.
Technique procedures, assessment procedures, and biomechanics are reviewed. Students continue to be introduced to new procedures which are practiced.
2 lecture hours, 4 laboratory hours, 4 semester hours

TECHNIQUE 816
Chiropractic Case Management.
This course is a review of all techniques taught at UBCC. This course also serves as a critique course for other techniques utilized in practice. Case management utilizing various chiropractic technique approaches are discussed and critically evaluated. Prerequisites: all courses semester I-VII.
6 laboratory hours, 3 semester hours

Clinical Nutrition

CLINICAL NUTRITION 621
Clinical Nutrition I: Pathology and Assessment.
This course introduces the student to diseases states and abnormal conditions due to biochemical deficiencies and abnormal metabolic states. Students are introduced to the methods of conducting a nutritional consultation through history and observation. Prerequisites: BC511, DX613, PH612, PA611.
2 semester hours, 2 semester hours

CLINICAL NUTRITION 712
Clinical Nutrition II: Treatment and Management.
This course is a continuation of CN621. Students are presented with abnormalities of a nutritional origin and begin to develop a treatment and management plan. Prerequisite: CN621.
2 semester hours, 2 semester hours

Clinical Services

CLINICAL SERVICES 721
Clinical Services I.
Students under the supervision of licensed faculty begin to administer care to patients at the UBCC Health Center. Students are introduced to the procedures and practices utilized by the health center through lectures and practical demonstrations. Students refine their skills in history taking, physical examination, radiology, technique, and case management and clinical decision making. Prerequisites: all courses in semesters I- V.
1 lecture hour, 4 clinic hours, 3 semester hours

CLINICAL SERVICES 812
Clinical Services II.
Under supervision of licensed faculty interns administer care to patients. All patient diagnoses and management plans are reviewed and approved by a clinic faculty member prior to the initiation of patient care. Students are assessed via evaluation by faculty. Prerequisites: all courses semesters I-VI.
25 clinic hours, 12. 5 semester hours

CLINICAL SERVICES 823

Clinical Services III.

Interns continue to administer care to patients under the supervision and approval of licensed faculty. Interns are monitored as to their progress towards completing the qualitative and quantitative requirements as set forth by the UBCC Health Center. Assessment of an intern's clinical competency are performed by faculty. Prerequisites: all courses semesters I-VII.
25 clinic hours, 12.5 semester hours

CLINICAL SERVICES 824

Clinical Services IV.

Interns continue to administer care to patients under supervision of faculty. Progress is monitored by faculty.
25 clinic hours, 4 semester hours

Diagnosis

DIAGNOSIS 521

Diagnostic Skills I: Case History.

This is a lecture and laboratory course whereby students learn the skills to take an appropriate case history as it relates to a patient's problem. Students are introduced to the methods of diagnostic reasoning and clinical decision-making skills. Prerequisites: CH511, AN512, PP512.
1 lecture hour, 2 laboratory hours, 2 semester hours

DIAGNOSIS 612

Diagnostic Skills II: Orthopedics and Neurology.

This lecture and laboratory course introduces students to the procedures necessary to examine the neuromusculoskeletal system. Normal and abnormal findings are presented and discussed. An emphasis is placed on a student's understanding of clinical anatomy and interpretation of positive tests and signs. Prerequisites: DX521, AN526, CH522, PP524.
2 lecture hours, 4 laboratory hours, 4 semester hours

DIAGNOSIS 613

Diagnostic Skills III: Physical Examination.

This lecture and laboratory course introduces students to the procedures necessary to examine the various systems of the body. Normal and abnormal findings are presented and discussed. Students continue to refine their history taking skills and development of diagnostic reasoning skills. Prerequisites: DX521.
2 lecture hours, 2 laboratory hours, 3 semester hours

DIAGNOSIS 624

Laboratory Diagnosis.

This course introduces the student to the appropriate ordering and interpretation of laboratory tests. Prerequisites: DX613, PH612, PA611.
3 lecture hours, 3 semester hours

DIAGNOSIS 625

Diagnostic Skills IV: Orthopedics and Neurology.

This course is a continuation of the examination procedures learned in DX612. Students through a problem-based format develop the clinically reasoning skills to differentiate conditions affecting the neuromusculoskeletal system.
2 lecture hours, 4 laboratory hours, 4 semester hours

DIAGNOSIS 726

Clinical Diagnosis: Dermatology/ Gynecology/Geriatrics.

This course presents the conditions and differential diagnosis of dermatological and gynecological conditions. The student is also made aware of the specific health care problems of the aged patient. Physiological effects of aging on the various systems within the body, as well as the common disorders of the elderly, with an emphasis on the neuromusculoskeletal system are presented. Prerequisites: all courses semesters I-V.
4 lecture hours, 4 semester hours

DIAGNOSIS 727

Maternal/Child Health.

This course introduces the student to the health care needs of the developing child and mother from conception to birth to childhood and adolescence. Complications of pregnancy, delivery, post partum care, and the chiropractic management of the obstetrical patient will be discussed. The examination and conditions of the pediatric patient as well as the management of the pediatric patient is presented. Prerequisites: all courses semesters I-V.
3 lecture hours, 3 semester hours 3 semester hours

Differential Diagnosis

DIFFERENTIAL DIAGNOSIS D621

Differential Diagnosis I: Eyes, Ears, Nose and Throat.

This course presents the diagnosis and differential diagnosis of diseases and conditions related to the head, eyes, ears, nose and throat. Conditions that primarily affect these areas as well as conditions that may refer to this area are presented. The management of these conditions is reviewed. Case studies are presented to aid students in the development of clinical reasoning skills. Prerequiste: PA611, AN525, DX613, DX624.
2 lecture hours, 2 semester hours

DIFFERENTIAL DIAGNOSIS 712

Differential Diagnosis II: Viscera.

This course presents the diagnosis and differential diagnosis of diseases and conditions affecting the internal organs, to include the cardiovascular system, pulmonary system, gastrointestinal and genitourinary system. This course reviews the concept of how these systems can refer pain to, and affect the functioning of, the neuromusculoskeletal system, and how the neuromusculoskeletal system can affect these systems. The management of diseases and conditions affecting these systems is covered. The laboratory reviews examination procedures related to these areas and presents case studies to assist students in developing clinical reasoning skills. Prerequisites: DX613, AN513, PA622, PH612, DX624.
4 lecture hours, 2 laboratory hours, 5 semester hours

DIFFERENTIAL DIAGNOSIS D723

Differential Diagnosis III: Neuromusculoskeletal.

This course is a presentation of the diseases and conditions affecting the neuromusculoskeletal system. Disorders affecting the spine, extremities, central and peripheral nervous system are reviewed. Neurological and orthopedic testing are covered as they relate to the differential diagnosis of these systems. Functioning of the human locomotor system and how other systems can affect this is stressed. Prerequisites: DD723, DX612, DX624, PA622.
4 lecture hours, 2 laboratory hours, 5 semester hours

Emergency Procedures

EMERGENCY PROCEDURES 711

Emergency Procedures.

Training in first aid principles is given in lectures and demonstrations dealing with the care of emergencies and accidental injuries. Treatment of wounds, fractures, poisoning, lacerations, shock, hemorrhages, heat exhaustion, drowning and burns are taught. Students are trained and receive certification in the administration of CPR.
1 lecture hour, 2 laboratory hours,
2 semester hours

Microbiology and Public Health

MICROBIOLOGY 621

Microbiology.

This course introduces the student to the basic concepts of microbiology with emphasis on the structure, growth, metabolism and genetics of bacteria. Host-parasite relationships of representative bacterial, fungal, viral, and protozoan pathogens are examined. A survey of microbial diseases includes modes of transmission, symptoms, diagnosis, physical and chemical methods of disinfection, sterilization and treatment. Presentations include lecture, laboratory and case studies. prerequisites BC511, PH521, PH612
4 lecture hours, 2 laboratory hours,
5 semester hours

MICROBIOLOGY 712

Epidemiology/Public Health.

This course covers the current environmental and public health concerns and issues. The course integrates health with diet, air and water pollutants, noise and substance abuse, compares community hygiene and industrial hygiene, defines epidemiology, and recognition of major communicable and noncommunicable diseases. Prerequisite MB621.
3 lecture hours, 3 semester hours

Neuroscience

NEUROSCIENCE 521

Neuroscience I.

This course focuses on the general anatomy and physiology of the central nervous system, with special emphasis on somatic sensory and motor function. The events involved in nervous and synaptic transmission are analyzed in detail. Case presentations are given to emphasize the correlation of structure to function and its contrast to neuroscience. Prerequisites AN511, AN512, AN514.
2 lecture hours, 2 laboratory hours,
3 semester hours

NEUROSCIENCE 612

Neuroscience II.

This course is a continuation of NS521 and will begin to emphasize the neuroscience of clinical case-based problems. The sensory and motor systems are examined in detail. An emphasis is placed on the correlation of anatomical structure to physiological function and to contrast this to clinical problems. The laboratory introduces students to neurological tests performed on patients and its correlation to the anatomy and physiology of the nervous system. Prerequisite: NS521, PP524, PH521, AN525.
4 lecture hours, 2 laboratory hours,
5 credit hours

Pathology

PATHOLOGY 611

Fundamentals of Pathology.

This course is a study of the pathophysiological processes and how this process alters the gross, microscopic, and clinical manifestations of disease. Basic pathological process of inflammation, repair, degeneration, necrosis, immunology, and neoplasia is presented. This course is also an introduction to diseases of the lymphatic, bone marrow, and neuromusculoskeletal system. Laboratory includes the study of gross and microscopic changes as well as clinical presentations of various diseases and functional disturbances. Prerequisites: All anatomy courses, PH521.
2 lecture hours, 1 laboratory hours,
2.5 semester hours

PATHOLOGY 622

Systems Pathology.

This course is a continuation of the study of the pathological processes of various diseases. This course emphasizes the pathological basis of systemic diseases of the cardiovascular, respiratory, gastrointestinal, urogenital, endocrine, hepatobiliary, renal, and pancreatic systems. The gross, microscopic, and clinical manifestations of various disease processes are presented. Prerequisites: PA611, PH612.
4 lecture hours, 2 laboratory hours,
5 semester hours

Physiology

PHYSIOLOGY 521

Physiology I.

This course emphasizes the functions of cellular structures which regulate homeostasis as well as their role in cell division and genetic control of protein synthesis. Emphasis is placed on the role of the cell membrane in the control of cellular events, particularly the propagation of action potentials and their role in muscle contraction. The effects of the physiology of hormones, their role in homeostasis, and functional changes associated with homeostasis is considered. Prerequisites: AN511, BC511.
2 lecture hours, 2 laboratory hours,
3 semester hours

PHYSIOLOGY 612

Physiology II.

This course is the study of the physiology at the organ and systems level. Included is the study of the circulatory, respiratory, renal, cardiovascular, gastrointestinal, and urogenital systems. Also included is the study of the endocrine system and its interrelationships with various organs and systems. There is an integration of normal physiology with pathophysiology and clinical concepts. Prerequisites: PH521.
4 lecture hours, 2 laboratory hours,
5 semester hours

PHYSIOLOGY 713

Toxicology/Pharmacology.

This course is the study of drugs and chemicals and how they interact with the living organism. Pharmacology studies the sites, mechanicms, absorption, and metabolism of common drugs. Toxicology studies the adverse reactions of drugs and poisons. Also studied are the effects of various nutrients and other supplements and how they interact in the body. The therapeutic use and toxic effects are studied for various drugs,

chemicals and other substances. Prerequisites: PH612, NS612, PA611.
3 lecture hours, 3 semester hours

Physiological Therapeutics

PHYSIOLOGICAL THERAPETICS 711

Physiological Therapeutics I.

This course is an introduction to the physics and clinical use of heat, cold, high volt galvanism, interferential current, low volt galvanism, ultrasound, electrical muscle stimulation, diathermy, and paraffin. The student is instructed on the development of a clinical management plan utilizing adjunctive therapies.
2 lecture hours, 2 laboratory hours
3 semester hours

PHYSIOLOGICAL THERAPETICS 722

Physiological Therapeutics II: Rehabilitation.

This course covers the concepts of rehabilitation as used in the UBCC Health Center and in private practice. The course covers the rehabilitative management of injuries to the spine and extremities common to the practice of chiropractic. Prerequisite: PT711.
2 lecture hours, 2 laboratory hours,
3 semester hours

Principles and Practice

PRINCIPLES AND PRACTICE 511

Principles and Practice I: History and Philosophy.

This is a course in which the history of healing is traced from its known origins through discovery of chiropractic to the present day. The basic concepts of chiropractic philosophy are discussed, as well as their current interpretation and clinical significance. Particular emphasis is placed upon chiropractic as a distinct profession in the health care community.
2 lecture hours, 2 semester hours

PRINCIPLES AND PRACTICE 512

Principles and Practice II: Communicating the Chiropractic Philosophy.

This course builds upon the students knowledge of chiropractic philosophy and introduces the students to communicating a chiropractic approach to health and wellness. Students are introduced on how to present the chiropractic principles and philosophical tenets to patients. Emphasis is also placed on how to effectively interact with patients as well as how to interact with small and large groups of people.
2 lecture hours, 2 semester hours

PRINCIPLES AND PRACTICES 513

Principles and Practice III: Ethics.

Students are introduced to various codes of behavior as they relate to patient relations, advertising, insurance reporting, professional and general personal behavior.
2 semester hours, 2 semester hours

PRINCIPLES AND PRACTICES 524

Principles and Practice IV: Subluxation Complex and Its Philosophical Concepts.

This course introduces the student to the current concepts of the subluxation complex and how it is integrated with the science art, and philosophy of chiropractic care. The course covers the various components of the subluxation complex, including the biomechanics, pathophysiology, histology, and neurological aspects. This information is correlated to the effects of chiropractic manipulation on the subluxation complex. Prerequisite: PP511, AN512.
2 lecture hours, 2 semester hours

PRINCIPLES AND PRACTICE 715

Principles and Practice V: Jurisprudence.

This course introduces students to licensure laws, civil and criminal law, malpractice, negligence, patient abandonment, informed consent, and proper record keeping. Prerequisites: all courses in semesters I-IV.
2 lecture hours, 2 semester hours

RESEARCH 511

Principles and Practice VI: Research Methods, Statistics, and the Philosophy of Science.

This course introduces the students to research principles, methodologies, instrumentation, statistics, and computer-based searches. The role of research and its application to the science, art and philosophy of chiropractic is presented. Current published literature relevant to chiropractic science and philosophy are reviewed and critiqued.
2 lecture hours, 2 semester hours

Psychology

PSYCHOLOGY 711

Clinical Psychology.

This course is designed to familarize the student with current psychological theory and practice. The student is instructed in behavorial assessment and the recognition of psychological disorders. Interviewing and counseling techniques are presented as well as the criteria for appropriate referal of patients to providers of psychological services.
2 lecture hours. 2 semester hours

Radiology

DIAGNOSTIC IMAGING 521

Diagnostic Imaging I: Normal Anatomy.

This course introduces students to radiographic anatomy, variants, and congenital anomalies as they relate to the spine, pelvis, skull, viscera, and extremities. Concepts as they relate to image formation, film reading, and report writing are introduced. Prerequisites: AN512.
1 lecture hour, 2 laboratory hours,
2 semester hours

DIAGNOSIS IMAGING 612

Diagnosis Imaging II: Normal Anatomy.

This course is a continuation of DI521. Students continue to develop their skills of radiographic interpretation as they relate to normal anatomical structures of the various parts of the body. Prerequisite: DI521.
1 lecture hour, 2 laboratory hours,
2 semester hours

DIAGNOSTIC IMAGING 623

Diagnostic Imaging III: Bone Pathology.

This course introduces students to the clinical and radiographic manifestations affecting osseous structures due to neoplasia, tumor-like conditions, metabolic and endocrine disorders, and normal variants. Students are introduced to special imaging as they relate to further evaluation of these conditions. Prerequisites: DI623, PA611, all anatomy courses.
2 lecture hours, 2 laboratory hours,
3 semester hours

DIAGNOSTIC IMAGING 714

Diagnostic Imaging IV: Arthritis and Trauma.

This course further develops the student's skills in the clinical and radiographic manifestations of osseous structures. Emphasis in this course is placed on the interpretation and recognition of disorders due to inflammatory and non-inflammatory arthritides, and trauma. Special imaging as they relate to further evaluation of these conditions is presented. Prerequisite: DI623.
2 lecture hours, 2 laboratory hours, 3 semester hours

DIAGNOSTIC IMAGING 725

Diagnostic Imaging V: Chest and Abdomen.

This course covers the interpretation of normal and abnormal clinical and radiographic manifestations of the internal organs. The chest, heart, and abdomen are studied on plain film as well as special examination procedures. Prerequisites: all previous DI courses.
1 lecture hour, 2 laboratory hours, 2 semester hours

DIAGNOSTIC IMAGING 726

Positioning and Physics.

This course covers the mechanics of x-ray production, film processing, x-ray factors, and radiation safety and protection for doctor and patient. Also covered is the placement and positioning of patients for the taking of x-ray studies. Students are introduced to the policies and procedures utilized by the UBCC Health Center.
3 lecture hours, 2 laboratory hours, 4 semester hours

DIAGNOSTIC IMAGING 827

X-Ray Review.

In a clinical setting, students are given a review in a case presentation style of various radiographic findings. Prerequisites: all courses semester I-VII.
2 laboratory hours, 1 semester hour

Computer Engineering

COMPUTER ENGINEERING 410

Introduction to Computer Architecture.

Computer organization; ALUs; fixed and floating point system; analysis of a complete microcomputer. Prerequisite: Computer Engineering 312.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 440

Image Processing.

This is a project-oriented course. Students will learn and implement FFT with applications, image enhancement, image restoration, image compression, and image tomography. Projects will be conducted on workstations. Prerequisite: Electrical Engineering 333 or Computer Science 320.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 447

Logic Synthesis Using FPGAs.

Logic design using textual design entry, VHDL. Behavioral, structural and data flow descriptions. Technology-dependent vs. technology-independent design. CPLD, SRAM and antifuse technologies. Rapid prototyping and retargeting designs. A major design project. Prerequisites: Computer Engineering 210, Computer Engineering 315 preferred.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 448D

Introduction to VLSI Design.

Design, testing and verification of very large scale integrated circuits. Basic topological structure of ICs. Clocking characteristics. Design methodology and use of software tools. Term project will include the design and testing of a custom integrated circuit. Prerequisites: Computer Engineering 210 and Electrical Engineering 348.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 449

Advanced VLSI Design.

Implementation of custom VLSI designs, digital and analog simulation, fault tolerant design, design for testability. A major project will include the implementation of a digital integrated circuit. Prerequisites: Computer Engineering 448D.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 460

Introduction to Robotics.

Basic Robotics, including: position and velocity sensing, actuators, control theory, robot coordinate systems, robot kinematics, differential motions, path control, dynamics, and force control. Robot sensing, simulation of manipulators, automation, and robot programming languages are also investigated. Prerequisites: Computer Science 102, Math 112, (and preferably Math 215) or permission of instructor.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 470

Advanced Robotics.

Advanced robotics and automation topics and techniques, including: active robotic sensing, intelligent and integrated manufacturing systems, robotic inspection, observation under uncertainty, multisensor feedback control of manipulators and mobile robots, advanced simulation and monitoring of robotic systems,high level modeling and control, and other topics. Prerequisites: Introduction to Robotics (Computer Science 360, Computer Engineering 360, Computer Science 460, or Computer Engineering 460) and preferably Computer Science 309, Computer Science 404, or Computer Engineering 404 (AI) or permission of instructor.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 471

Computer Communications I: System Analysis.

Basic elements of system analysis and introduction to communication systems; categories of data transmission systems. Response-time requirements and control of user errors. Different types of modulation and multiplexing. Cost of lines: terrestrial and satellite lines. Network reliability and intelligence in the network. Basic software considerations and developments in data transmission software. Design computations; basic statistics and queueing analysis. Simulation of communication lines. Analysis of imperfections; noise and distortion, line failures, data errors, delays and blocking, treatment of errors. Prerequisite: Computer Science 102; Computer Engineering 210.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 472

Computer Communications II: Networks.

Computer networks and their subsystems. Data communication fundamentals. Sources of network traffic. Packet switching systems and techniques. Simple and adaptive routing in large networks. Flow control and congestion avoidance algorithms. Communication protocols and interfaces. Electronic funds transfer and data

security. Data encryption standards and algorithms. One-way functions and their applications. Network optimization problems and algorithms. Synthesis of network topologies. Capacity assignment problems. Hierarchical and mixed-media networks analysis. Prerequisite: Computer Engineering 471 or permission of instructor.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 484
Machine Perception.
An introduction to sensing and machine vision. Vision algorithms that are usable in practical applications, sensing mechanisms and various types of sensed data representation,sense date processing and interpretationfor different applications. Prerequisites: Computer Science 400, Computer Engineering 312.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 485
Computer Vision.
A project-oriented course designed to familiarize the student with the computer image display, processing, and various limitations. The procesing includes edge detection, Hough transform, thinning algorithms, moment invarient methods, relaxation algorithms, among others. Prerequisite: Permission of instructor.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 487D
Advanced Microprocessor Techniques.
Application of microprocessors and associated peripheral devices from both hardware and software aspects. Prerequisite: Computer Engineering 386.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 488D
Interactive Computer Graphics.
Introduction to interactive computer graphics in computer-aided design. CRT display techniques; programming and graphic display principles; 2-D and 3-D display methods; command and programming languages for graphics. Term project using interactive display device is required. Prerequisites: Computer Engineering 212.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 489
Software Engineering.
Structural development methodology for large software systems. Planning requirements, design, test, and validation. Advanced topics in software development. Prerequisite: Computer Science 102, Computer Engineering 212.
3 lecture hours; 3 semester hours

COMPUTER ENGINEERING 496D
Digital Signal Processing Laboratory.
Design and implementation of digital filters, FFT algorithms and adaptive signal processing applications using the TMS 320C25 processors. Term project required. Prerequisite: Electrical Engineering 343 or Electrical Engineering 593; Computer Engineering 386.
3 periods; 3 semester hours

COMPUTER ENGINEERING 497
Advanced Problems in Computer Engineering.
Independent study of advanced topics in Computer Engineering and submission of project report as required. Problem assignment and semester hours to be arranged with and approved by the Department Chair.
1-6 semester hours

COMPUTER ENGINEERING 597
Advanced Problems in Computer Engineering.
Lecture hours, semster hours and topics to be arranged with Department Chair.

COMPUTER ENGINEERING 598
Thesis in Computer Engineering.
Lecture hours, semster hours and topics to be arranged with Department Chair.
1-6 semester hours

Computer Science

COMPUTER SCIENCE 400
Advanced Programming in C.
Advanced survey of C language features. File I/O. Aggregate variable types. Call by value and call by pointer parameter passing. Higher-level pointers, pointers to functions, functional arguments, array mapping functions. Dereferencing rules. Random access files. Recursive algorithms, emphasis on modularity and code reusability. Exception handling and recovery techniques. Introduction to C++ (non-object-oriented features), function prototyping, variable-length argument lists, call by reference, function and operator overloading, object I/O, and dynamic memory. Prerequisite: Introductory course in C Language.
3 semester hours

COMPUTER SCIENCE 402
Advanced Data Structures and Algorithms.
A course in advanced data structures and high-level algorithms. Exchange sorting, binary search, sparse matrix transpose and multiplication. Stack, queue, and list manipulation. Varied uses of recursion. Graph representations and algorithms including traversals, path finding, closure, and spanning trees. Sorting of files. Hashing and collision handling. Critical paths and PERT. Prerequisite: Computer Science 102 or equivalent.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 403
Operating Systems.
Advanced treatment of fundamental concepts in operating system design. Scheduling,parallel processes, memory mangement, resource allocation, sharing, protection of systems. Prerequisite: Computer Engineering 308.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 404
Artificial Intelligence.
Foundations of the theory of Artificial Intelligence. Game playing, pattern recognition, description of cognitive processes, heuristic decision procedures, general problem solvers. Learning and robotics. Discussion of the relationship with human thought process. Extensive Lisp programming. Prerequisite: Computer Science 102 or permission of instructor.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 405
Introduction to Expert System Design.
Principles and techniques of rule-based expert systems; knowledge representation, rule design, and inference engine control. Types of expert systems: diagnosis, synthesis, and planning. Commercial expert systems. Prerequisite: Computer Science 102, 309.
3 periods; 3 semester hours

COMPUTER SCIENCE 409
Automata Theory.
Theory of automata and learning machines. Finite-state sequential machines. Prerequisite: Permission of instructor.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 410

Java Programming.

Object oriented programming, using Java, packages, interfaces, multi-threading, classes, inheritance, exceptions, interfaces, native methods, applets. Prerequisite: Computer Science 400 or permission of instructor.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 420

Theory of Computation.

Finite automata. Recursive functions and programmed machines. Context-free languages. Turing machines, Church's Thesis, and algorithmically insoluble problems. Prerequisite: Computer Science 227 or familiarity with mathematical reasoning, and knowledge of computer programming.

3 semester hours

COMPUTER SCIENCE 435

C and Unix Programming.

Introduction to shell programming and system programming languages in the Unix environment. Files, directories, filters, processors, queues, semaphores. A major project focuses information towards a particular application. Prerequisite: Computer Science 400.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 450

Data Base Design.

Survey of data structures used in data bases; relations; hierarchical and network data models; theoretical issues in data base processing; practical issues in data base design, programming, and implementation. Prerequisite: Computer Science 402.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 460

Introduction to Robotics.

Basic robotics including: position and velocity sensing, actuators, control theory, robot coordinate systems, robot kinematics, differential motions, path control, dynamics and force control. Robot sensing, simulation of manipulators, automation and robot programming, languages are also investigated. Prerequisite: Computer Science 102, Math 112, (and preferably Math 215) or permission of instructor.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 470

Advanced Robotics.

Advanced robotics and automation topics and techniques, including: active robotic sensing, intelligent and integrated manufacturing systems, robotic inspection, observation under uncertainty, multisensor feedback control of manuipulators and mobile robots, advanced simulation and monitoring of robotic systems, high level modeling and control, and other topics. Prerequisites: Introduction to robotics (Computer Science 360, Computer Engineering 360, Computer Science 460, or Computer Engineering 460), and preferably Computer Science 309, Computer Science 404 or Computer Engineering 404 (AI) or permission of instructor.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 473

Introduction to Computer-Oriented Research Applications.

A seminar type course designed to familiarize the student with the needs, scope, and limitations in computer-oriented research applications in fields such as Physics, Chemistry, Engineering, Mathematics, etc. Prerequisite: Computer Science 402 or equivalent.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 480

Introduction to Neural Networks.

Introduction to neural computing, and fuzzy logic. Neural network models including feedforward, multilayered networks, backpropagation, fuzzy associative memories, self-organizing maps and adaptive resonance. Applications. Projects to implement networks designed for specific applications. Prerequisite: Proficiency in C or C++, calculus and matrix methods.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 484

Machine Perception.

An introduction to sensing and machine vision. Vision algorithms that are usable in practical applications, sensing mechanisms and various types of sensed data representation, sense date processing and interpretation for different applications. Prerequisite: Computer Science 400, Computer Engineering 312.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 490

Parallel Processing.

Models of parallel computation including distributed, multiprocessor, multicomputer. Parallel programming constructs. The mutual exclusion problem, synchronization and communication methoods. Multicomputer topologoies and topolgies and topological embedding. Classes of parallel algorithms and design approaches. Performance analysis of parallel computation, including detailed and high level. A major project is required. Prerequisite: Computer Engineering 312, Computer Science 401, Computer Science 400.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 497

Advanced Problems in Computer Science.

Independent study of advanced topics in Computer Science and submission of project report as required. Problem assignments and semster hours to be arranged with and approved by the Department Chair.

COMPUTER SCIENCE 504

Advanced Artificial Intelligence (AI) Concepts.

Advanced topics in AI; natural language processing and learning simulated using an AI language (e.g. LISP) while planning will be implemented directly on robots in the AI lab. Integration of AI techniques into a working system. Prerequisite: Computer Science 309, 404.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 505

Advanced Expert System Design.

Principles and techniques of complex expert systems. Uncertainty, alternate knowledge representations, and inference engine design. Each student will be required to design and debug a complex expert system of his/her own choosing. Prerequisite: Computer Science 404, 405.

3 lecture hours, 3 semester hours

COMPUTER SCIENCE 597

Advanced Problems in Computer Science.

Lecture hours, semester hours and topics to be arranged with Department Chair.

COMPUTER SCIENCE 598

Thesis in Computer Science.

Lecture hours, semester hours and topics to be arranged with Department Chair.
14 semester hours

Counseling

COUNSELING 505

Helping Relationships.

This course provides a definitive view of counseling including the characteristics of the counselor and the elements of the counseling process. Through experiential exercises and videotaped simulated counseling the student will attain the skills of attending, empathic listening and focusing on important client concerns.
3 semester hours

COUNSELING 510

The Counselor as Professional.

This course serves as an orientation to the helping profession addressing issues that impact on the provision of services. Included will be a survey of work settings, diverse populations, professional organizations, certifications, ethics and law.
3 semester hours

COUNSELING 516

Social and Cultural Foundations of Counseling.

This course examines how social and cultural factors impact on the individual and subsequently how the counselor attends to and addresses the different social forces and cultural differences.
3 semester hours

COUNSELING 520

Introduction to Guidance Services.

The student will gain an understanding of guidance services by surveying the areas of measurement, career development, individual counseling and consultation.
3 semester hours

COUNSELING 521

Group Process, Application and Theory.

Through the vehicle of interpersonal growth, students will explore their awareness of self and others. The course will focus on the dynamics of leadership and various membership roles and alternative theoretical models of groups will be studied.
3 semester hours

COUNSELING 522

Career Development Theory, Research and Counseling.

The student will be given an introduction to the psychology of career development, through exploration of theories, research, counseling models, print and nonprint media. Students will develop a portfolio of materials and a personalized model for career counseling.
3 semester hours

COUNSELING 523

Introduction to Counseling Theories.

This course surveys the major theories of counseling including the Psychoanalytic, Behavioral, Humanistic, Cognitive and Systems approaches. The student will gain an understanding of the role of theory, the philosophical basis of the theories, the divergent methods utilized, and the utility of each perspective.
3 semester hours

COUNSELING 524

Strategies and Techniques of Counseling.

In this course the student will attain a familiarity with all aspects of the counseling process from initial engagement through termination. Specific skills of strategies, techniques, and interventions will be demonstrated then developed by the student in class exercises and simulated counseling sessions.
3 semester hours

COUNSELING 524E

Supervised Practicum.

The student will participate for 2 semesters in an intensive supervised clinical experience in selected human service agencies, counseling centers and educational institutions. Prerequisites: All core courses and permission of the Department. By arrangement.
3 semester hours

COUNSELING 524H

Internship.

The student will participate for two semesters in a supervised field experience in selected business settings, open to Human Resource Development students only. Prerequisite: All core courses and permission of the Department.
3 semester hours

COUNSELING 525

Appraisal Procedures for Counselors.

The student will become familiar with a variety of standardized assessment instruments, learn how to evaluate them, select several tests that are appropriate for use in an area of professional responsibility related to a real or anticipated counseling situation, and interpret test results in a supervised setting.
3 semester hours

COUNSELING 526

Drug Counseling.

This course is designed to provide a practical experience for counselors learning to work with drug abusers, alcoholics, and those who are prone to drug and alcohol abuse. A didactic segment of the course is designed to provide the student with background information to make his/her experience more meaningful. Lectures by former addicts and alcoholics, people familiar with pharmacology and those understanding legal aspects of abuse will be part of the course. There will also be a sharing of experience among members of the class who will practice counseling skills in small groups.
3 semester hours

COUNSELING 527

Counseling the Aging I.

An experiential approach is used to give both the beginning student and the practitioner knowledge and increased awareness of their own feelings about aging, death and bereavement, and retirement. Topics include: Attitudes Toward the Elderly; Active Listening and Related Counseling Skills; Pre-retirement Planning; Housing Options for the Elderly; Death and Bereavement Work.
3 semester hours

COUNSELING 528

Counseling the Aging II.

Class sessions will include role playing, simulation and other techniques to further student skills and knowledge in counseling the aging. Topics include: Health, Psychology, Illness; Families and the Elderly; Sensory Awareness and Reality Orientation; The Impact of Institutionalization; Community Resources.
3 semester hours

COUNSELING 529

Mid-Life Counseling.

This course focuses on the mid-life client who, historically, has been neglected in theory, practice and general concern of professionals in counseling and related fields. Special problems and needs of the mid-life person are explored in the context of the human growth and development process over the total life span. Through class experiences, students will develop counseling procedures appropriate for this age group and their specific issues.
3 semester hours

COUNSELING 531

Computer Applications in Counseling and Human Resources.

Students will be provided hands-on experience with computer programs useful to counselors and human resource developers in a variety of work and study environments. Programs useful within the contexts of other courses required in the counselor preparation program will be introduced. Software samples relevant to a variety of counseling settings will be studied and evaluated. .
2 semester hours

COUNSELING 566X

Counseling and Psychopathology.

This course covers a survey of maladaptive behavioral patterns and disorders, assessment of client functioning and need, and differential therapeutic responses. The student will gain an understanding of psychopathology (with emphasis on those syndromes most frequently encountered by counselors), diagnostic procedures and treatment goals. They will be able to identify and differentiate between major areas of psychological disorders and be able to respond to them appropriately.
3 semester hours

COUNSELING 580D

Special Problems of Counseling.

Courses designed to allow the student the opportunity to select a topic for study which is both relevant to the counseling and guidance field and important to the student's professional development. By arrangement.
1-6 semester hours

COUNSELING 590

Master's Project.

A course designed to assist the student in development of the "product of excellence" which is the final product required for completion of the Master's degree in Counseling.
1 semester hour

COUNSELING 621B

Seminar and Field Experience in Student Personnel Work.

A professional level experience in one or more student personnel service offices whereby the student is provided the opportunity to assume duties and responsibilities related to the organizational, administrative and research aspects of student personnel work. In addition to the minimum of five class hours per week of supervised field experience, regular weekly sessions are held for all participating students in which field experiences are shared and relevant competencies developed.
3 semester hours

COUNSELING 622

Group Work Processes and Skills.

A laboratory and seminar course in which students will become actively involved in working with small groups. Emphasis in the supervised group and seminar sessions will be on the leader's role as a facilitator of individual growth within the group setting. Prerequisite: Counseling 621, 523, 524, or departmental permission.
3 semester hours

COUNSELING 623

Counseling and Consultation Skills.

This course explores the role and implications of the consultative process in various settings: with co-workers, with individuals and groups, with organizations and institutions. Participants will have an opportunity to increase skills in the consultative process; to exchange experiences, problems and concepts in practice on consultation; and to increase the number of alternatives one may use in the consultative process. By experiencing and learning from an actual consulting assignment, each participant will have an opportunity to be more aware of self and increase the congruence between personal and professional life.
3 semester hours

COUNSELING 624

Group Strategies and Techniques for Developing Human Potential.

Advanced treatment of the application of human relations skills and strategies in a workshop setting. Each participant will contract to develop specific skills in a minimum of one approach up to a maximum of six approaches from such areas as reality therapy, transactional analysis, psychodrama, gestalt, bio-energetics, Otto's human potential or other approaches. Prerequisite: Permission of instructor.
1-6 semester hours

COUNSELING 627

Life Work Planning.

This course will provide opportunities to examine and share various career planning modules that can be used in a variety of settings. Participants will have the opportunity to experience one model in particular, Life Work Planning. The Life Work Planning experience is divided into two sections: Phase I encourages greater client self-awareness through various exercises and group interaction; Phase II provides clients with a variety of proven decision and planning tools. With these tools, clients can clarify their goals, decisions and plans; test their present direction; seek new directions; look for alternatives; and move toward action and greater control. Life Work Planning links clients' present realities with personal growth. Throughout the experience, they work alone, or in a sub-group of four or five people. The exercises and tools can be used again throughout their lives to focus attention on their position in a world of change.
3 semester hours

COUNSELING 680D

Advanced Seminar in Counseling.

By Arrangement.
1-6 semester hours

COUNSELING 681D

Internship in Guidance and Counseling.

Post masters' students only. By Arrangement.
1-6 semester hours

Education

Note: ModMAP courses are designated with the prefix of EDMM. Specific titles are listed with the programs of study in the chapter for graduate studies in the School of Education and Human Resources. Consult the division faculty for detailed course descriptions.

EDUCATION 348 C, M

Directed Observation and Supervised Teaching in the Elementary or Middle School.

This is a full-time field experience in a selected elementary or middle school. This meets requirements of Connecticut's BEST program. PRAXIS I must be passed. Department permission is required.
6 semester hours

EDUCATION 392

Directed Observation and Supervised Teaching in Secondary Schools.

This is a field experience in selected secondary schools. This meets requirements of Connecticut's BEST program. Departmental permission is required. PRAXIS I must be passed.
6 semester hours

EDUCATION 440

Methods and Materials in Teaching Language Arts.

This course is designed to explore the scope and sequence of language arts abilities and content.

ED 440C concentrates on the language arts classroom practices and materials of the K-6 level. Teaching of basic language skills and the full utilization of communication skills is emphasized.

ED 440M concentrates on the language arts classroom practices and materials of the 4-8 level. The focus is on both basic language skills and the interdisciplinary relationships in the curriculum of middle schools.

ED 440J concentrates on the language arts classroom practices and materials of the secondary level. Teaching the components of English and literature is emphasized.
3 semester hours

EDUCATION 441

Methods and Materials in Teaching Mathematics.

This course deals with methods of teaching mathematics. Materials are examined for their use in diagnosis, remediation and enrichment.

ED 441C concentrates on the scope and sequence, as well as appropriate activites, for the K-6 level.

ED 441M concentrates on the appropriate practices for middle school, grades 4-8, with an emphasis upon interdisciplinary connections.

ED 441J concentrates on the content and methodology of mathematics for secondary students.

ED 441 C—2 semester hours
ED 442 M, J— 3 semester hours

EDUCATION 442

Methods and Materials in Teaching Social Studies.

This course introduces unit planning, instructional strategies and materials for social studies. Contemporary thinking about effective social studies instruction is stressed.

ED 442C concentrates on the activities and materials for social studies in the K-6 classroom.

ED 442M concentrates upon appropriate content and practices for middle grades, 4-8. Interdisciplinary possibilities are examined.

ED 442J concentrates upon appropriate content and practice for the secondary level.

ED 442 C— 2 semester hours
ED 442 M, J— 3 semster hours

EDUCATION 443

Methods and Materials in Teaching Science.

This course introduces teaching approaches, instructional materials, and contemporary thinking about science education

ED 443 C concentrates upon the practices and materials of effective science for grades K-6.

ED 443 M concentrates upon the appropriate content and practices for the middle grades, 4-8. Interdisciplinary possibilities are examined.

ED 443J concentrates upon the appropriate content and practices for the secondary science curriculum.

ED 443 C— 2 semester hours
ED 443 M, J— 3 semester hours

EDUCATION 445

Methods and Materials of Teaching Business.

This course focuses on various purposes of the business curriculum in a school setting. It examines the range of teaching strategies and materials for classroom practices.
3 semester hours

EDUCATION 446

Methods and Materials in Teaching a Foreign Language.

This course familiarizes the student with the major purposes of the study of foreign language in the schools. It introduces the strategies and classroom activities for effective teaching. It examines appropriate materials for teaching foreign languages.
3 semester hours

EDUCATION 447

Methods and Materials of Teaching English as a Second Language.

This course explores the language needs of children who are learning English as a second language. It reviews and explains effective methods and strategies for teaching such students. The most appropriate materials are identified and utilized.
3 semester hours

EDUCATION 448

Methods of Teaching Art in the Public Schools.

This course focuses on the range of methods appropriate to teaching art in elementary, middle and secondary levels. Demonstrations and hands-on practice are core experiences.
3 semester hours

EDUCATION 449

Materials and Techniques for Teaching Art in the Public Schools.

This course will focus on art and craft media, techniques and procedures for the prospective art and classroom teacher which are presently offered within the art curriculum of public schools. These would include drawing and painting, printmaking,

silk screening, enameling and others depending upon the background and experience of individual students.
3 semester hours

EDUCATION 450
Field Experience.
This course is a structured observation in a public school. The goals of the course are to facilitate the students awareness of self, of school pupils, and of prospective teachers. The course is an elective for other majors. The number of semester hours taken should be determined with the student's advisor.
1-6 semester hours

EDUCATION 500
Research Techniques and Report Writing.
This is an introduction to the research process, to the understanding of published research, and to the application of research findings to education. The course prepares the student to write formal papers and research reports.
3 semester hours

EDUCATION 502
Philosophical Foundations of Modern Education.
This is an examination of basic philosophical problems which underlie the educational questions that confront society. The aim is to provide a foundation upon which a critical understanding of fundamental questions of modern culture and education can be developed.
3 semester hours

EDUCATION 504
Comparative and International Education.
This is a comparative study of educational policies and practices in selected countries throughout the world. Global problems like peace, social and economic justice, and environmental quality are examined with a view to promoting global awareness in American education.
3 semester hours

EDUCATION 505
Intercultural Relations: Teaching and Learning in Multicultural Environments.
This course presents an overview of theories about educational, social and cultural problems of minority culture students, about teacher perceptions and expectations, about parental involvement. The course also critically analyzes policies and practices of multicultural and bilingual education. The thrust of the course is to develop appropriate and non-biased methods of teaching all children.
3 semester hours

EDUCATION 509
Psychological Foundations In Education.
This is concerned with the work of educators in general and teachers in particular. Topics include student characteristics (personality, growth, and development, adjustment, etc.) motivation, learning, measurement and evaluation, objectives, and teaching methods.
3 semester hours

EDUCATION 510
Internship Training.
This is conducted with a team of faculty in a series of training workshops to prepare Interns to undertake successful field experiences.
2 semester hours

EDUCATION 511A
Health.
This course addresses the issues of alcohol, nicotine or tobacco, drugs and acquired immune deficiency syndrome. Techniques and strategies for teaching about these subjects are presented.
.5 semester hours

EDUCATION 511B
Intergroup Relations
This course addresses the topics of intergroup relations, mental health and school violence prevention and conflict resolution components. Issues for teachers concerning toleration and respect among groups of people, youth suicide, child abuse and ways of preventing school violence will be discussed.
.5 semester hours

EDUCATION 515
Clinical Experience—Internship Program.
Interns will work under supervision in a learning environment, providing a variety of paraprofessional services to the schools.
3 semester hours

EDUCATION 530
Child Growth and Development
This course is an investigation of child growth and development with emphasis on the implications for school-aged children. The needs, problems, and characteristics of children from infancy to adolescence are discussed. Social, emotional, cognitive, physical and language development are stressed.
3 semester hours

EDUCATION 536
Young People's Literature.
This surveys books and periodicals emphasizing criteria for selection and evaluation, procedures for establishing a program of literature in the schools, and opportunities to explore the interpretation of literature in the classroom through drama, story telling, book reporting, and choral speaking. For certification, Education 536C is focused on children's literature. Education 536J concentrates on adolescent literature. Education 536M concentrates on a pre-adolescent literature.
Educ 536C – 2 semester hours
Educ 536M/J – 3 semester hours

EDUCATION 558
Evaluation of Instructional Outcomes.
This course acquaints students with the modern concepts of evaluation, some of the methods and techniques for obtaining evaluative data necessary for the instructional program, and specific standardized and criterion-referenced measures that are used to appraise objectives in education.
3 semester hours

EDUCATION 560M
Human Growth and Development, Middle
This course provides an opportunity for the study of the subject matter of human development, with a concentration upon the uniqueness of the adolescent period. Theoretical models and methods of researching human growth and development including cognition, physical, social, emotional and moral development will be studied. Genetic and environmental influences of human development will be discussed. Implications for classroom instruction in the middle grades will be explored.
3 semester hours

EDUCATION 564

Education of the Exceptional Student.

The focus of this course is placed upon the instructional methods and materials for exceptional students. General management techniques and administrative procedures are considered in light of the student's special needs in order to identify and work effectively with the major categories of exceptionality, including the learning disabled, the handicapped, and the gifted, etc. Requirements of the 94-142 law are examined.

3 semester hours

EDUCATION 565

Contemporary Problems in Education I.

This is a study of foundations, issues and contemporary trends in education with their application to teaching in the schools. An effort will be made to encourage teachers to develop an understanding of their own philosophy of education and how it affects their teaching.

3 semester hours

EDUCATION 566

Contemporary Problems in Education II.

This independent study fulfills the Final Degree Option for the Master's degree. Students pursue an individually planned project under advisement of a faculty member. Extensive reading supports the project. May be taken as an extension of ED 500 or ED 565.

3-6 semester hours

EDUCATION 571

Diagnosis of Reading and Language Arts Difficulties.

This course examines the range of problems that may cause students difficulties. It studies the instruments and strategies used to identify those difficulties. Management techniques for discerning and tracking difficulties are studied.

3 semester hours

EDUCATION 574

Developmental Reading in the Elementary School.

This course emphasizes theories related to the teaching of reading, evaluation of pupil needs, use of basal reader and other approaches to reading instruction, development of word recognition and comprehension skills, provision for gifted, average, and slow-learning readers, utilization of materials.

3 semester hours

EDUCATION 575

Reading in the Content Area.

This course emphasizes developing reading skills beyond the basic fluency level. Varied reading strategies and critical reading competencies are emphasized.

3 semester hours

ED 575M concentrates on middle grades with applications to text books and expository materials.

3 semester hours

ED 575J concentrates on high school grades with applications to reading purposes, literacy interpretations and varying speeds.

3 semester hours

EDUCATION 580C

Special Problems in Elementary Education.

This is intended for students interested in independent study or research of a selected topic or problem in consultation with a faculty member. By arrangement. Faculty permission required.

1-6 semester hours

EDUCATION 580J

Special Problems in Secondary Education.

This is intended for students interested in independent study or research of a selected topic or problem in consulting with a faculty member. By arrangement. Faculty permission required.

1-6 semester hours

EDUCATION 580L

Special Problems in Behavioral Science Research and Computer Applications.

This course is designed to enhance the efficiency and scope of one's research through the development of specific competencies needed for computer processing. Students will be exposed to computer-assisted instruction (C.A.I.) and computer managed instruction (C.M.I.), and will develop projects that focus on computer applications. By arrangement. Lab fee required.

1-6 semester hours

EDUCATION 590

Computer Literacy.

This is designed to provide the student with hands-on experience in the use and application of micro-computers. The student will have the opportunity to evaluate existing course work and its application as well as the writing of elementary programs in Logo and Basic. Lab fee required.

1-3 semester hours

EDUCATION 591

Software Evaluation.

This is designed to have students develop software evaluation criteria for the purpose of evaluating published computer programs. The student will have an opportunity to preview programs for the Apple IIe, IBM, and Macintosh computers. Lab fee required.

1-3 semester hours

EDUCATION 595

Thesis Research—Masters Level.

This is a culminating experience option at the Master's level for Education students.

2-6 semester hours

EDUCATION 597

Practicum.

Practicum for Remedial Reading and Remedial Language Arts certification. Involves field experience for diagnosing, instructing and evaluating strategies and techniques of remediation.

6 semester hours

EDUCATION 600

Statistics and Research Design.

A thorough study of advanced statistical procedures and experimental designs used in education, and of the major methods of non-experimental education research.

3 semester hours

EDUCATION 669

Specialized Professional Study, Project Execution, Part II.

Seminar and project implementation. Prerequisite: Education 668. By arrangement.

1-6 semester hours

EDUCATION 680C

Advanced Seminar in Elementary Education.

By arrangement. Division permission is required.

1-6 semester hours

EDUCATION 680J

Advanced Seminar in Secondary Education.

By arrangement. Division permission is required.

1-6 semester hours

EDUCATION 695

Advanced Thesis Research — Sixth Year Level.

A culminating experience at the level of the Sixth Year Professional diploma.

2-6 semester hours

Educational Leadership

EDUCATIONAL LEADERSHIP 551

Curriculum Development and Implementation.

This is a study and development of models for curriculum design and implementation at all levels of schooling. Emphasis is placed on current research and practice relevant to curriculum design and the planning and monitoring of curriculum plans in educational settings. Such topics as curriculum assumptions, goals and objectives, knowledge and content, curriculum evaluation, implementation and staff development strategies are examined.

3 semester hours

EDUCATIONAL LEADERSHIP 601

Contemporary Educational Problems.

This course will focus upon contemporary society and changing policy issues that confront managers and leaders of educational thought throughout the 21st Century. Seminal issues such as the impact of political forces upon federal, state, and local educational policies will be considered. Labor relations will be analyzed. Empowerment of teachers will be examined.

3 semester hours

EDUCATIONAL LEADERSHIP 611

Administration: Organizing and Staffing Educational Institutions.

This introduces administrative and organizational theory. The general theory of decision making. Basic concepts of the essential skills and behaviors of the administrator.

3 semester hours

EDUCATIONAL LEADERSHIP 612

Planning: Establishing Direction for Educational Institutions.

This is an analysis of the planning component of managing educational institutions. There is a study of application and evaluation of various systems analysis techniques in structuring formal planning systems. The relationship between planning and institutional decision-making is examined. Problems in the implementation of planning activities in educational institutions are discussed.

3 semester hours

EDUCATIONAL LEADERSHIP 613

Leadership: Influencing People to Achieve Organizational Objectives.

This is an investigation of concepts, research findings, and practices focusing on the development and change of educational organizations in relation to relevant goals and objectives. Emphasis is placed on such areas as leadership theory and behavior, organizational climate, human relations and communications within the organization, and change strategies. Theoretical concepts are integrated with practical applications in a laboratory setting.

3 semester hours

EDUCATIONAL LEADERSHIP 618

Public School Finance.

This is a study of educational fiscal control including budget preparation and presentation, accounting procedures, tax structures, analyses of costs, comparative data and auditing. Includes federal, state and local phases of support of educational systems. Special emphasis is given to New York and Connecticut fiscal patterns.

3 semester hours

EDUCATIONAL LEADERSHIP 619

Public School Law.

This is a study of the legal basis for public education in the United States; a study of state and federal statutes providing for education. An examination is made of statutes, court decisions, and policies and practices arising out of these factors. The legal status of boards, teachers, administrators, pupils and parents is examined with special emphasis on New York and Connecticut.

3 semester hours

EDUCATIONAL LEADERSHIP 651

Workshop in Curriculum Development.

This is a project-oriented workshop focusing on the practical applications of principles of curriculum design and related instructional systems development. There is an emphasis on the integration of various curriculum considerations in an evaluation of curriculum. This is appropriate for curriculum leaders, supervisors, administrators, and experienced teachers. Prerequisite: Education 551.

3-6 semester hours

EDUCATIONAL LEADERSHIP 652

Supervision: The Evaluation and Professional Development of Educators.

This is a study of concepts and strategies focusing on the evaluation of teachers and other educators for purposes of performance improvement and quality assurance. Emphasis will be placed on research findings, current practices, and the achievement of competency related to classroom observation and evaluation, the planning and implementation of professional development, and the creation of organizational climate and human relationships conducive to effective evaluation and professional growth of educators.

3 semester hours

EDUCATIONAL LEADERSHIP 679

Departmental Seminar in the Management of Educational Institutions.

This is an examination of significant issues, problems and practices in the field of educational management. University faculty members and educational leaders in the field will participate as resource persons. Prerequisites: At least three of the following: Education 611, 612, 613 and 652.

3 semester hours

EDUCATIONAL LEADERSHIP 680A

Independent Study in Educational Management.

Offered by arrangement.

1-6 semester hours

EDUCATIONAL LEADERSHIP 681A

Internship in Educational Management.

A cooperatively guided administrative experience in a school system. Prerequisite: Completion of major portion of the requirements for the Sixth Year Professional Diploma and permission of major advisor.

3-6 semester hours

EDUCATIONAL LEADERSHIP 682A

Special Topics in the Management of Educational Institutions.

Special department offerings including workshops, conferences, institutes focusing on new developments in the field.
1-6 semester hours

EDUCATIONAL LEADERSHIP 800

Continuing Doctoral Seminar.

The seminar meets periodically during the academic year and for two full weeks each summer. It provides opportunities for students to work with scholars and leaders from a variety of disciplines to broaden perspectives on educational leadership and to develop an intellectual style for dealing with educational problems.
6 semester hours per year

EDUCATIONAL LEADERSHIP 801

Educational Program Development.

Emerging trends, concepts and practices in the planning, design, and implementation of education programs intended to meet the individual and group needs of learners in a changing society are reinvestigated. Emphasis is placed on the roles and responsibilities of leaders in such processes as school/community educational goal setting, needs analysis, systematic program design, supervision and staff development. Students will focus on the application of new knowledge to the investigation and solution of program development in the field.
6 semester hours

EDUCATIONAL LEADERSHIP 802

Community Analysis and Administrative Decisions.

Ethnic, social class, religious, economic and political factors influencing educational choices and school operations in selected communities and districts are analyzed. Concepts and techniques for understanding community attitudes and aspirations towards education are emphasized.
6 semester hours

EDUCATIONAL LEADERSHIP 803

Organizational Analysis and Development.

Organizational analysis and development is intended to provide practicing educational leaders with concepts, attitudes, and skills required to comprehend the nature, status, and problems of existing school systems, sub-systems, and other educational organizations. It focuses on research relevant to organizational behavior, instruments and techniques for organizational analysis, and the development of managerial, clinical and consultative skills required for training and intervention in the improvement of organizational functioning.
6 semester hours

EDUCATIONAL LEADERSHIP 804

Constitutional, Legal, and Political Issues Confronting Educational Leaders.

Legal questions relating to personnel, students, community, religion, finance, school property, teacher organizations, equality of opportunity and other legal and political issues with which the educational leader must be familiar in order to be effective in decision-making and organizational development are investigated. Emphasis is placed on "landmark" judicial decisions, recent statutory developments, constitutional background. Students will read, analyze, and interpret significant Supreme Court decisions regarding educational matters as well as pertinent lower federal and state court decisions. The principal of "non judicial" remedies will be explored and the appeals process will be examined in detail.
6 semester hours

EDUCATIONAL LEADERSHIP 805

Policy Determination.

Policy development in the conduct and operation of business organizations, educational institutions, government, and community agencies is analyzed. The human institutional forces shaping policy will be considered. Modes of analysis and questions required to determine sound policy decisions will be explored in terms of concrete and immediate problems confronting society.
6 semester hours

EDUCATIONAL LEADERSHIP 806

Quantitative Analysis and Evaluation Strategies.

This course considers current techniques for designing, implementing and analyzing projects in education and typical models for facilitating decision-making. The elements of personnel and program assessment within the contemporary educational system are included. Strategies focusing upon experiential learning and community contact are featured, and the student will be exposed to collection and analysis of real data and related computer simulation activities. Statistical and evaluative investigations are emphasized which are both fundamental and sufficiently sophisticated for advanced decision-making and leadership. This course is required.
6 semester hours

EDUCATIONAL LEADERSHIP 807

Management of Educational Institutions.

Participants in this course will investigate the planning and finance functions relative to the management of educational institutions. The planning component, the relationship between planning and institutional decision-making, and problems of implementing planning activities in educational contexts are considered. Finance is addressed through the treatment of budget preparation and presentation, accounting procedures, tax structures, and the role of local, state, and federal governments in support of educational system.
6 semester hours

EDUCATIONAL LEADERSHIP 808

Human Relations and Communication.

This course will provide educational leaders with the necessary skills and knowledge to maximize the human resources within an institution. It will develop in participants increased personal awareness, greater sensitivity to others, effective communications and appropriate strategies for change.
6 semester hours

EDUCATIONAL LEADERSHIP 809

International Education.

This course is designed to provide supervisors, administrators, and curriculum specialists at the elementary, secondary, and collegiate levels with a broad-based understanding of the role of educational leaders throughout the world. Consideration will be given to: how educational leaders are selected and function in various countries; how educational policies are developed and implemented by foreign governments; the impact of the United Nations upon world education.
6 semester hours

EDUCATIONAL LEADERSHIP 845

Dissertation Preparation Seminar.

During the third year of the program students participate in seminars which focus

on the selection and development of a dissertation proposal. Students are ordinarily expected to complete the major portion of their work on the dissertation proposal prior to the conclusion of the formal part of the program. This course is required.
3 semester hours each term

EDUCATIONAL LEADERSHIP 850
Dissertation Research and Advisement.
Individual research and advisement relative to a student's dissertation topic is the sine qua non of this course. Doctoral candidates are required to register for Education Management 850 continuously until their dissertations have received final approval. The dissertation research and advisement fee is $600.00 per term. Prerequisite: Successful completion of Comprehensive Examination.
0 semester hours

Electrical Engineering

ELECTRICAL ENGINEERING 435
Advanced Network Analysis
Matrix analysis of electrical networks. Network topology. Laplace transform and state variable methods. N-Port and N-terminal networks and their interconnections. Network functions and responses. Prerequisite: Electrical Engineering 333.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 436D
Network Synthesis.
Introduction through brief review of network analysis. Synthesis of LC and RC Foster and Caver networks of transfer functions and of resistor-terminated networks. Second order systems and the sensitivity function. Review of ideal and real operational amplifiers and circuits. Study and design of active filters. Prerequisite: Electrical Engineering 382, 333.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 437
Microwaves.
Passive and active elements for the generation, modulation, amplification and reception of microwaves. Radar and other microwave systems. Prerequisite: Electrical Engineering 341.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 440
Random Processes.
Classical Probability; definitions, theorems, density functions, characteristics. Stochastic processes, spectral analysis, correlation, discrete time processes, Fourier transform applications. Prerequisite: Math 323 or equivalent.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 443
Applied Digital Signal Processing.
The FFT Spectral Analysis, Filtering in the presence of noise. Correlation. Introduction to stochastic signal processing. Computer projects. Prerequisite: Electrical Engineering 394.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 448D
Introduction to VLSI Design.
Design, testing and verification of very large scale integrated circuits. Basic topological structure of IC's. Clocking characteristics. Design methodology and use of software tools. Term project includes the design and testing of a custom integrated circuit. Prerequisite: Computer Engineering 210 and Electrical Engineering 348.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 455
Microwave Laboratory.
Hands-on experience with basic microwave coaxial and waveguide components in various circuit configurations. Measurement of power, wavelength, VSWR, attenuation, directional coupling, impedance. Use of the Smith Chart. Prerequisite: Electrical Engineering 437.
3 lab hours; 3 semester hours

ELECTRICAL ENGINEERING 496
Digital Signal Processing Laboratory.
Design and implementation of digital filters, FFT algorithms and adaptive signal processing applications using the TMS 320101 TMS 320C25 processors. Term project required. Prerequisite: Electrical Engineering 443.
3 lab periods; 3 semester hours

ELECTRICAL ENGINEERING 541
Digital Communication Systems.
Detection of deterministic and random signals in thermal noise. Digital sequences. Optimal filtering and statistical decision theory. Optimum receiver design criteria. Performance, configuration and trade-offs. Prerequisite: Electrical Engineering 372D.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 545
Advanced Controls Theory.
Root locus analysis and state variable analysis methods applied to continuous systems. Discrete (sampled) systems, z-transform methods and digital controls. Performance and stability criteria. Prerequisite: Electrical Engineering 319.
3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 582
Advanced Topics in Electronics.
Analysis and design of both linear and nonlinear electronic circuits. Use of computer simulation, systems considerations, including microprocessors and power stages for activator interfacing. Prerequisite: Electrical Engineering 382.
3 lecture hours; 3 semester hours

SPECIAL STUDIES AND RESEARCH

ELECTRICAL ENGINEERING 597
Advanced Problems in Electrical Engineering.
Lecture hours; semester hours and topics to be arranged.

ELECTRICAL ENGINEERING 598
Thesis in Electrical Engineering.
Lecture hours, semester hours and topics to be arranged. 1-6 semester hours

Graduate Studies in Business

GRADUATE STUDIES IN BUSINESS 400
Accounting Concepts.
Introduction to principles of financial and managerial accounting including the measurement, processing, and communication of accounting information for use by a variety of users including business owners, managers, creditors, prospective investors, and others interested in the financial condition of an entity and the results of its operations. Prerequisite: Admissions to graduate study.
3 semester hours

GRADUATE STUDIES IN BUSINESS 410

Economic Analysis.

The prevailing patterns of economic institutions, national income analysis, international trade, prices and production; economic development, market structure and consumer decision analysis. Prerequisite: Admission to graduate study.
3 semester hours

GRADUATE STUDIES IN BUSINESS 420

Financial Management.

An introduction to the problems of financing the business firm, in both the short and long runs. Special emphasis on the environment in which financial decisions are to be made, especially with respect to money and capital markets and the financial intermediaries who service these markets, both nationally and internationally. Prerequisite: Admissions to graduate study.
3 semester hours

GRADUATE STUDIES IN BUSINESS 430

Organizational Behavior.

This course permits students to examine theory and practice of interpersonal, group process and organizational behavior. Individual and small group projects develop and illustrate principles of relationships, communications, role assignment, leadership and conflict management in organizations. Experiential designs permit learning through group participation, case analysis and individual problem solving. Prerequisite: Admissions to graduate study.
3 semester hours

GRADUATE STUDIES IN BUSINESS 431

Operations Management.

The student is introduced to operations management methods and processes which are fundamental to delivery of products and services of every variety. Topics covered include capacity analysis and planning, inventory management, design of jobs for quality and cost effectiveness, demand forecasting, work flow management, project management and total quality management. Prerequisite: Admissions to graduate study.
3 semester hours

GRADUATE STUDIES IN BUSINESS 440

Marketing Concepts.

The theoretical underpinnings of the marketing discipline will be taught through text, articles and class discussion. Advanced mastery of these principles will come through a rigorous applied format. Multinational student teams will structure and then solve a marketing problem for clients of UB's Small Business Development Center. Recent teams have explored the commercial market potential of artificial skin, developed advertising revenue development strategies for Fairfield County Woman and done competitive assessment on toxic waste tracking systems. Prerequisite: Admission to graduate study.
3 semester hours

GRADUATE STUDIES IN BUSINESS 450

Management Science.

Introduction to the Management Science ap-proach with emphasis on modeling techniques and interpretation of results. Concentration is on linear constrained models and interpretation of results for managerial decision-making. Prerequisite: Admission to graduate study and familiarity with PC applicator.
1 semester hour

GRADUATE STUDIES IN BUSINESS 451

Management Information Systems.

Information system goals, development, and utilization. This course develops the fundamental knowledge, philosophy, and skills necessary for specification, development and utilization of computer-based information systems. Prerequisite: Admission to graduate study.
2 semester hours

GRADUATE STUDIES IN BUSINESS 452

Statistical Decision Theory.

Introduction to basic statistical methodology and its applications to business decision-making. Main topics include probabilities, discrete and continuous probability distributions, probability sampling techniques, sampling distributions, interval estimation and hypothesis testing. Students are encouraged to use statistical software packages to perform statistical analysis. Prerequisite: Admission to graduate study.
3 semester hours

GRADUATE STUDIES IN BUSINESS 500

Accounting for Managers.

The use of accounting information in profit planning and control including accounting systems, budgeting and performance evaluation, and identification and interpretation of relevant data for short-run decision analysis. The objective is to emphasize how accounting information is a valuable part of the over-all management function. Prerequisite: Graduate Studies in Business 400.
3 semester hours

GRADUATE STUDIES IN BUSINESS 502

International Accounting.

Examines the diverse accounting practices employed by different countries and their effects on multi-national firms' operation. Performance evaluation in multi-national enterprises, impact of differences in national accounting principles and practices, and accounting under central planning. Discussion of critical problem areas such as taxation, transfer pricing, financial planning, and information systems within an international framework. Prerequisite: Graduate Studies in Business 400.
3 semester hours

GRADUATE STUDIES IN BUSINESS 503

Analysis of Financial Statement

The objective of the course is to develop an understanding of, and appreciation for, traditionally prepared financial statements and to develop a critical ability to evaluate the usefulness and content of these statements for making optimum accounting and financial decision. Student will be appraised of the rapid changes occurring in the accounting field as they affect accountants, investors, and managers.
3 semester hours

GRADUATE STUDIES IN BUSINESS 508

Financial Reporting and Analysis

An overview of generally accepted accounting principles underlying the content of financial statements including alternative inventory valuation methods, lease accounting, segment reporting and reporting for employee benefit plans. Study and analysis of actual corporate annual reports and government and not-for-profit financial statements. Prerequisite: Accounting 101.
3 semester hours

GRADUATE STUDIES IN BUSINESS 510

Managerial Economics.

The role of economics in management decision-making. Applied price theory with case analysis. Prerequisite: Graduate Studies in Business 410 or equivalent.
3 semester hours

GRADUATE STUDIES IN BUSINESS 511

International Trade and Finance.

International trade and finance in the world economy. Topics include spot and forward exchange markets, balance of payments analysis under fixed as well as flexible exchange rates, and the role of the multinational environment. Prerequisite: Graduate Studies in Business 410 or equivalents; some knowledge of statistics is helpful, but not essential.
3 semester hours

GRADUATE STUDIES IN BUSINESS 520

Advanced Financial Management and Policy.

Maximization of the value of the firm through optimal sourcing and use of funds. Decisions are analyzed using sources and uses of funds, capital budgeting, portfolio theory and the capital asset pricing model frameworks. Prerequisite: Graduate Studies in Business 420 or equivalent.
3 semester hours

GRADUATE STUDIES IN BUSINESS 521

The Financial Management of Financial Institutions.

Asset and liability management of financial institutions. Risk, return, liquidity capital adequacy and other relevant issues are discussed and analyzed. Prerequisite: Graduate Studies in Business 420.
3 semester hours

GRADUATE STUDIES IN BUSINESS 522

Investment Analysis.

Provides a framework for the analysis of individual securities including stocks and bonds and other financial instruments. Develops a systematic framework for the construction of efficient portfolios and the evaluation of portfolio performance. Prerequisite: Administrative Science 400 and Finance 500.
3 semester hours

GRADUATE STUDIES IN BUSINESS 523

Financial Futures, Options, and Swaps.

Analysis of the recent financial derivatives like futures, options and swaps. Concepts and application of Hedging, Arbitrage, Duration Immunization, Portfolio Insurance will be given. Also this course will utilize the computer program to be used by many financial managers and arbitragers. Prerequisites: Finance 425.
3 semester hours

GRADUATE STUDIES IN BUSINESS 524

International Financial Management.

Theory and description of foreign exchange rates and foreign exchange markets. Emphasis on external funding sources, financial risk management, foreign exchange risk analysis, international investments, and international banking. Prerequisites: Finance 500 and 612.
3 semester hours

GRADUATE STUDIES IN BUSINESS 525

International Portfolio Analysis.

Designed to familiarize the students with the financial management techniques which can be employed in the management of portfolios of financial assets for various types of financial institutions. The course follows Finance 512, Securities Analysis. It will deal with institutional investment goals, problems and solutions. The solutions will be arrived through portfolio analysis and portfolio construction. Prerequisites: Finance 512.
3 semester hours

GRADUATE STUDIES IN BUSINESS 529

Advanced Topics in Financial Management.

Financial Theory, Allocation of resources through time, by individuals and firms. Criteria for optional investment decisions, under conditions of uncertainty. Prerequisite: Finance 500.
3 semester hours

GRADUATE STUDIES IN BUSINESS 530

Management Theory.

Concepts, methods and research which are applicable and useful in the management of organizations are broadly surveyed to increase student's awareness of the breadth and complexity of management processes. Fundamentals of business strategy, organizational structuring, leading, communicating and controlling are examined within contexts of the historical evolution of management thought, concern for high business ethics, and meeting global competition. Prerequisites: Graduate Studies in Business 430 and 431.
3 semester hours

GRADUATE STUDIES IN BUSINESS 531

Small Business and Entrepreneurship.

A comprehensive review of the marketing, operating configuration, financial and business strategy plans that must be mastered and developed as foundation for start-up of a small business or entrepreneurial enterprise. Students are required to develop a comprehensive professional business plan for a business of their choice which is acceptable to the instructor. Prerequisites: Graduate Studies in Business 430 and 431.
3 semester hours

GRADUATE STUDIES IN BUSINESS 532

Advanced Operations Management.

Students in this course apply the methods from GSB 431 (Management 430) to projects of their own design and choosing, employing PC software designed for application to operations management issues. Emphasis is put on quantitative and data-based problem-solving and decision-making processes applied by the professional manager to the improvement of product or service cost and quality. Prerequisite: Graduate Studies in Business 431 (Management 430).
3 semester hours

GRADUATE STUDIES IN BUSINESS 533

Human Resources Management.

An in-depth survey is offered of current theory, research and practice in the management of human resources in organizations. Job design, recruitment, selection, performance feedback, goal-setting, training, employee rights, safety, compensation and benefits issues are reviewed within the context of their application in the United States as a world standard for such practices, with comparisons to customs and practices in the international arena. Intensive library research into current human resource research is required.
3 semester hours

GRADUATE STUDIES IN BUSINESS 534

Organizational Development.

The theory and practice of organization intervention technology applied as a means to constructive organization change is introduced. Types and levels of intervention are evaluated. Sources of resistance to organizational change are examined and methods for overcoming that resistance are studied. Students apply theory and technology experiential to intervention projects with groups or organizations they currently have access to and evaluate the effectiveness of the approaches used. Prerequisites: GAB 430 (Management 400).
3 semester hours

GRADUATE STUDIES IN BUSINESS 534

Organizational Development.

The theory and practice of organization intervention technology applied as a means to constructive organization change is introduced. Types and levels of intervention are evaluated. Sources of resistance to organizational change are examined and methods for overcoming that resistance are studied. Students apply theory and technology experientially to intervention projects with groups or organizations they currently have access to and evaluate the effectiveness of the approaches used. Prerequisites: Management 400.
3 semester hours

GRADUATE STUDIES IN BUSINESS 535

Organization Theory.

This course examines the structural variables and configurational typologies that are used in designing or redesigning organizations. The effects of technology, task and size on overall effectiveness, and the appropriateness of various product, process, geographic, and functional configurations are explored. Patterns of organizational culture are examined to assess their influence on performance effectiveness, and the possible paths of cultural evolution are traced. The influences of formal versus informal structure are discussed and current research on organization design is evaluated. Prerequisites: Management 400 and 430.
3 semester hours

GRADUATE STUDIES IN BUSINESS 536

Conflict and Negotiation.

The development of conflict-management and negotiating skills with particular emphasis on achieving effective and efficient outcomes within a global and multicultural context. Experiential exercises, readings and discussions will demonstrate various strategies for a broad range of negotiating scenarios, e.g., buyer-seller, management-labor, personal salary increase, cross-national, etc.
3 semester hours

GRADUATE STUDIES IN BUSINESS 540

Buyer Analysis.

This course will take up special topics in buyer behavior. The leading models of buyer behavior in both industrial and consumer settings will be analyzed. The qualitative and quantitative marketing research tools necessary to understand buyer behavior dynamics in any market will be stressed. Cases will be drawn from market situations around the world. Prerequisite: Graduate Studies in Business 440.
3 semester hours

GRADUATE STUDIES IN BUSINESS 541

Global Market Management.

Strategy planning, implementation and control for market entry and development. Topics include social, political and economic changes affecting marketing opportunity; focused versus dispersed marketing efforts; marketing in developed and undeveloped countries; and marketing systems required for the various strategic alternatives. Prerequisite: Graduate Studies in Business 440 or equivalent.
3 semester hours

GRADUATE STUDIES IN BUSINESS 542

Marketing Management.

A course designed to enable students to develop the ability to analyze marketing problems so as to insure more effective decision-making. Using the case method, the course deals with major functional areas of product development, pricing, distribution, simulation of consumer demand; strategy of marketing policy, integration of managerial tactics with the over all objective of the firms. Prerequisite: Marketing 420 or equivalent.
3 semester hours

GRADUATE STUDIES IN BUSINESS 543

Problems in Marketing Research

Application of research methods and techniques to the problems of marketing management. Extensive use of simulation technique in marketing research cases. Prerequisite: Marketing 420.
3 semester hours

GRADUATE STUDIES IN BUSINESS 544

Sales and Presentation Skills.

This course is academically oriented towards professional and real world expos Students will participate in the realities that exist in sales presentation environments. Specific skills and techniques as well as theoretical applications.
3 semester hours

GRADUATE STUDIES IN BUSINESS 546

Legal Environment or Marketing.

Examination of federal and state laws and regulations governing marketing practices, their causes and consequences, and consideration of proposals for their revision. Restraints of trade, permitted cooperation, pricing restrictions, trademark policy, deceptive acts and practices, "consumerism." Prerequisite: Marketing 420.
3 semester hours

GRADUATE STUDIES IN BUSINESS 550

Advanced Statistical Decision Theory.

Applications of statistical techniques business decision-making are the primary focus of the course. Main topics include simple linear regression and correlation, multiple regression and correlation, time series analysis, and business forecasting. Students will work on selected projects of individual interest, and are encouraged to incorporate business simulation models into individual projects. Prerequisite: Graduate Studies in Business 420.
3 semester hours

GRADUATE STUDIES IN BUSINESS 551

Business Simulation.

Study of the formulation, development and use of business simulation models it the decision-making process, with emphasis on applications in business and economics. Topics include scope, nature, and types of simulation models, simulation languages, and introduction to gaming and heuristics. Emphasis on basic concept and techniques in model formulation, construction and implementation, validation experimentation, optimization, and interpretation. Prerequisites: Familiarity with a computer programming language and GAB 420 or equivalent.
3 semester hours

GRADUATE STUDIES IN BUSINESS 552

Operations Research.

An introduction to the methodology of operations research and the mathematical techniques involved. Emphasis on constructing appropriate mathematical models to represent various real life operating systems and on developing techniques for analyzing the performances of these models. Model design, linear programming problems, transportation problems, assignment problems, duality theorem, integer programming and introduction to inventory theory.
3 semester hours

GRADUATE STUDIES IN BUSINESS 553

Operations Research II.

Continuation of Operations Research 1. Stochastic processes, queuing theory and application, dynamic programming, network analysis, sequencing analysis and simulation techniques. Prerequisite: Management Science 501 or equivalent.
3 semester hours

GRADUATE STUDIES IN BUSINESS 554

Information Systems Analysis and Design.

A course in the analysis, design, and project management of computer-based business systems. Using such tools as system flow charts and decision tables, the course stresses the usability of the system to operating managers. Nontechnical managers are encouraged to participate in the specification, decision-making, and review of system-designs. Documentation, program specifications, system improvement. Course level and content is suitable for managerial as well as more technically.
3 semester hours

GRADUATE STUDIES IN BUSINESS 555

Database.

This course is an introduction to database concepts, principles, and practices. Emphasis on the object-oriented logical design of relational databases. Hands-on practices in SQL is gained through use of XDB-SQL. Students are required to do a term project.
3 semester hours

GRADUATE STUDIES IN BUSINESS 556

Expert Systems.

A nontechnical introduction to expert systems (a branch artificial intelligence) for managerial decisions. Using state-of-the-art expert systems development software, student project involves developing and demonstrating a rule-based expert system. Topics include: overview of artificial intelligence, expert systems in general and in particular for managerial decisions; rule and reasoning; inference engines, forward and backward chaining; uncertainty, certainty factors, and fuzzy variables; other knowledge representation approaches, sematic nets, frames.
3 semester hours

GRADUATE STUDIES IN BUSINESS 557

Telecommunications.

A nontechnical introduction to telecommunications (data and voice) for users and potential telecommunications managers. Topics include: communications concepts, hardware, and software; network configurations, local area networks (LANs) value.
3 semester hours

GRADUATE STUDIES IN BUSINESS 560

Business and Society.

Topics are designed to give the student an awareness of the legal and ethical issues surrounding specific problems that substantially affect the vast economic, marketing system not only in the United States, but also between the United States and other persons or countries engaged in International Business. Prerequisite: Admissions to graduate study.
3 semester hours

GRADUATE STUDIES IN BUSINESS 561

Business Policy.

A capstone course dealing with the development and implementation of business strategy within a framework of ethical decision making. This perspective encompasses financial, technical, marketing, production and human resources considerations. Specifically, it tests the capability of the student to apply all prior learning to solve actual strategic management problems. The final examination of this course shall constitute, therefore, an outcome assessment of what the student has learned in the Program. This examination, normally an extensive and comprehensive case study, will be graded by several faculty members representing different and relevant disciplines. Prerequisite: Final semester for completion of M.B.A. Program
3 semester hours

GRADUATE STUDIES IN BUSINESS 570

International Issues.

This course focuses on current international issues that affect business operations at home and abroad. Changing business environments are discussed and analyzed. Students are required to formulate new global business policy and strategies in light of emerging international events. In some cases, students may supplement their study by field trips and on-site analysis. Prerequisite: Admissions to graduate study.
3 semester hours

GRADUATE STUDIES IN BUSINESS 571

Foreign Languages.

Students will enroll in foreign language courses offered at U.B. in order to obtain at least a working knowledge of a chosen foreign language.
3 semester hours

GRADUATE STUDIES IN BUSINESS 580

Experiential Learning: Leadership and Organizational Change.

This course focuses on the development of versatile leadership skills important in the effective management of change. Through role-playing exercises, video tapes, diagnostic tools, seminar discussion, selected readings, and a group project students will learn theory and build interpersonal skills necessary for providing leadership in diverse groups and organizations. Scheduled topics include: Managing Cultural Differences; Psychological Contracts; Communication; Theories of Planned Change; Models for Diagnosing systems; Team Building; Process Consultation; and Group Dynamics. Where possible, segments of the module will be team-taught by carefully selected members of our multinational faculty to highlight leadership practices in unique cultural settings. Class size will be limited to twenty, with forty teacher-student contact hours. Students will need to be interviewed prior to registration. Prerequisite: Admissions to graduate study.
3 semester hours

GRADUATE STUDIES IN BUSINESS 581

Business Games.

Students will review major business events and technological changes that have taken place in recent decades. With an emphasis on exploring new business venture opportunities. Students will be required to develop a business plan which is consistent with their career objectives. In addition, all students will participate in investment decision-making processes which incorporate many of the recent innovations in the financial services and communications industries. Prerequisite: Admissions to graduate study.
3 semester hours

GRADUATE STUDIES IN BUSINESS 582

Internships.

Each student in this course will undertake a project in a real organization under the supervision of an instructor. The student will prepare an industry bibliography and

write a paper summarizing the tasks and accomplishments encountered within the organization. Through this experience students will apply management principles and theory in a practical setting.
3 semester hours

GRADUATE STUDIES IN BUSINESS 595
Independent Study in Business.
Prerequisite: Written approval to register by the Director and the Department Chair.
3 semester hours

GRADUATE STUDIES IN BUSINESS 599
Thesis Project.
Completion of a report based on field, library, or institutional research to demonstrate ability to conduct investigations in a managerial discipline and simulation techniques. Prerequisite: Management Science 501 or equivalent.
3 semester hours

Management Engineering

MANAGEMENT ENGINEERING 406
Computer Integrated Manufacturing (CIM).
The design, development, and implementation of an information system to integrate all the functions of a manufacturing enterprise. The course presents the full perspective of information systems integration for the functions of engineering, marketing, manufacturing and cost control. CIM has been a critical strategic consideration for manufacturers in developed countries. The course emphasizes practical approaches to the introduction and development of the total CIM concept.
3 lecture hours; 3 semester hours

MANAGEMENT ENGINEERING 424
Quality Control Methods.
This course presents a comprehensive summary of methods for managing quality. The course objective is to develop an operational familiarity with contemporary methods found to be effective. Methods for every facet of the enterprise are considered. Topics covered include statistical process control, quality function deploy for every facet of the enterprise are considered. Topics covered include statistical process control, quality function deployment, concurrent design, the house of quality, and the Taguchi method. This course is intended for those students who do not intend to specialize in quality management.
3 lecture hours; 3 semester hours

MANAGEMENT ENGINEERING 475
Quantitative Methods in Production Management.
This course presents an overview of quantitative methods for analyzing production and distribution operations. The course objective is to develop an operational capability with the application of commonly used methods of analysis. Major emphasis is given to the use of linear programing and simulation. Methods are presented within the framework of analyzing contemporary problems in production and distribution. This course is intended for those who do not have any prior exposure to the methods covered.
3 lecture hours; 3 semester hours

MANAGEMENT ENGINEERING 484
Product Costing & Economic Analysis of Investments.
This course covers three areas: (1) the development and use of standard financial statements; (2) standard methods and their application for the measurement economic value creation; and (3) methods for computing both product costs and costs to serve differing customer types for multi-product manufacturers serving a wide range of customer types. Topics include financial statement analysis from several perspectives; discounted cash flow and associated investment decision techniques such as net present value and internal rate of return; and transaction based product and customer service costs.
3 lecture hours; 3 semester hours

MANAGEMENT ENGINEERING 505
Project Management.
A managerial approach to the planning, implementation and effective control of resources involved in a project, whatever the product or industry. Includes project evaluation, planning, scheduling, and control. Criteria for additional support or termination. Course uses modern computer based project management software.
3 lecture hours; 3 semester hours

MANAGEMENT ENGINEERING 514
Technology Planning & Management.
The identification of important technologies; the valuing of the appropriate amount of resources that should be committed to an R&D program; and the management of the R&D organization. Technology identification employs techniques for assessing near-term emerging technologies that may be relevant to an enterprise. R&D pricing covers both the traditional and contemporary use of options pricing. Discussions on managing R&D emphasize the unique organizational character of the R&D process.
3 lecture hours; 3 semester hours

MANAGEMENT ENGINEERING 521
Technology & the Competitive Enterprise.
Studies the use of technology as the primary means of improving competitive advantage. Examination of the general rules of success in business based on the data from such studies as PIMS, and an investigation of the role of technology within these rules. Case studies are used to demonstrate both successful and unsuccessful attempts to employ technology as a means to improve competitive advantage.
3 lecture hours; 3 semester hours

MANAGEMENT ENGINEERING 530
On-Line Quality Methods.
The study of the full spectrum of methods to manage the quality of goods and services. The focus is on the production of the goods or the delivery of a service. Non-production activities are not considered. Heavy emphasis on statistical methods for testing and analysis. Prior background in statistical analysis required. This course is intended for those who wish to specialize in quality management.
3 lecture hours; 3 semester hours

MANAGEMENT ENGINEERING 532
Contracting & Acquisition Management.
Principles and techniques for contracting and managing the acquisition of materials function. Focus is the acquisition of technology-based goods. Topics include the acquisition organization, policies and procedures, vendor selection processes, pricing considerations, quality and inventory management issues, and risk management.
3 lecture hours; 3 semester hours

MANAGEMENT ENGINEERING 535
Off-Line Quality Control Methods.
The study of quality management methods primarily associated with non-production

activities of the enterprise. Topics include the Taguchi Technique, Quality Function Deployment, experimental designs, Concurrent Design, Total Quality Management, and reliability analysis, probability models & statistical estimation. This course is intended for those interested in a more advanced understanding of quality management.
3 lecture hours; 3 semester hours

MANAGEMENT ENGINEERING 540
Advanced Simulation Techniques.
An in-depth study of the use of simulation as an analysis tool for the study of production and distribution processes. Alternative simulation programs are reviewed. One program, SIMNET, is used to study a variety of production and distribution management issues. Extensive use of computer simulation required.
3 lecture hours; 3 semester hours

MANAGEMENT ENGINEERING 555
Contemporary Problems in Technology Management.
This course number is used to present current topics as they arise from time to time. Each such topic will be offered under an appropriate title with this course number.
1-3 semester hours

MANAGEMENT ENGINEERING 597
Advanced Problems in Management Engineering.
Hours and topics to be arranged.
3 semester hours

Mathematics

MATHEMATICS 401
Advanced Analysis for Scientists and Engineers I.
Partial differential equations, Bessel functions, Legendre polynominals. Fourier series, boundary and initial value problems, topics in vector analysis, tensor analysis. Prerequisite: Math 301 (Differential Equations). One semester of advanced calculus strongly recommended.
3 semester hours

MATHEMATICS 402
Advanced Analysis for Scientists and Engineers II.
Functions of a complex variable, conformal mapping, calculus of residues, operators. Prerequisite: Math 301 (Differential Equations). One semester of advanced calculus, or permission of the instructor.
3 semester hours

MATHEMATICS 403
Functions of a Complex Variable I.
The general theory of functions of a complex variable. Complex algebra, analytic functions and their mappings, complex integration, infinite series, Taylor and Laurent expansion, isolated singularities, residue theory. Prerequisite: One year of advanced calculus.
3 semester hours

MATHEMATICS 404
Functions of a Complex Variable II.
Continuation of Mathematics 403. Additional topics include insofar as time permits, harmonic functions, conformal mapping and applications, normal families. Riemann mapping theorem, analytic continuation, Riemann surfaces, infinite products, entire functions. Prerequisite: Math 403.
3 semester hours

MATHEMATICS 407
Introduction to Modern Analysis.
Metric Spaces, sequences and series, continuity differentiation, Riemann-Stiejies integral, functions of several variables.
3 semester hours

MATHEMATICS 411 & 412
Introduction to Applied Mathematics 1 & 2.
Introduction to Hilbert Space, Fourier Series, calculus of variations, boundary value problems, Green's functions and integral equations.
3 semester hours

MATHEMATICS 414
Numerical Analysis.
Interpolation, numerical differentiation and integration, numerical solution of differential equations, least squares, error analysis. Prerequisite: Math 215 (Calculus and Analytic Geometry III) or equivalent. Math 301 (Differential Equations) strongly recommended.
3 semester hours

MATHEMATICS 415
Advanced Numerical Analysis.
Conveyance, numerical stability, round off error, discretization error arising from the approximation of differential and integral equations.
3 semester hours

MATHEMATICS 423
Mathematical Statistics I.
Probability theory, discrete and continuous distributions, transformations, moment generating functions, characteristic functions, central limit theorem, sampling distributions. Prerequisite: Math 215 (Calculus and Analytic Geometry III) or equivalent.
3 semester hours

MATHEMATICS 424
Mathematical Statistics II.
Continuation of Mathematics 423. Additional topics include estimation, testing of hypothesis, confidence intervals, regression, and analysis of variance. Prerequisite: Math 423 or Math 323.
3 semester hours

MATHEMATICS 431
Introduction to Topology and its Application.
Elements of point set theory; introduction to topological spaces including metric spaces; separation and countability axioms; connectedness; compactness; completeness. Prerequisite: One year of advanced calculus.
3 semester hours; offered as needed

MATHEMATICS 451
Linear Algebra and Matrix Theory I.
Linear vector spaces, bases, dimension, inner product, norm, orthogonality. Linear transformations, matrices, matrix algebra, Hamilton-Cayley Theorem, eigenvalues and eigenvectors, rank. Prerequisite: Math 391 (Modern Algebra) or equivalent.
3 semester hours

MATHEMATICS 453
Modern Algebra I.
Groups, rings, fields, ideals, polynomials. Prerequisite: Math 391 (Modern Algebra) or equivalent.
3 semester hours

MATHEMATICS 454

Modern Algebra II.

Continuation of Math 453. Modules, field extensions, Galois theory, real fields, special topics. Prerequisite: Math 453.
3 semester hours

MATHEMATICS 480

Selected Topics in Mathematics.

Current topics in applied mathematics topics will be selected from specific disciplines as a focus for intense study. Current topics in Physics, Chemistry, Biology and Computer Science will be offered on a semester basis. The course may be repeated as long as topical focus changes.
3 semester hours

Mechanical Engineering

MECHANICAL ENGINEERING 409

Advanced Thermodynamics.

Thermodynamic systems. Transfer of heat. Reversibility and irreversibility. Entropy. Properties of pure substances. Applications of thermodynamics to special systems. Change of phase. The physics of very low temperatures. Chemical thermodynamics. Ideal gas reactions. Heterogenous systems. The third law of thermodynamics. Equilibrium conditions and stability. Prerequisite: Mechanical Engineering 310.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 410

Advanced Fluid Dynamics.

Advanced topics in applied fluid mechanics. Review of continuity, momentum, and energy equations for viscous, incompressible fluid; voricity and circulation concepts and theorems.Selected topics from the following areas: Complex potential, conformal mapping and applications. Airfoil and wing theory. Boundary layer theory; similarity solutions for laminar flows, integral techniques for turbulent flows. Compression and expansion waves in compressible flows; oblique shock waves, Prandtl-Meyer flow. Propagating waves and applications; shock tube, transients in duct systems. Prerequisite: Mechanical Engineering 307.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 417

Control System Engineering.

Introduction to analysis and synthesis of feedback systems. Dynamic modeling of pneumatic, hydraulic, thermal, electromechanical systems, and manufacturing processes. Concept of transfer functions and block diagram representations. Functional description of linear and non-linear systems. Linearization and dimensionless scaling. State-space representation of dynamic systems. Transient response using convolution integral and computational techniques. Root locus and frequency response methods. Performance indices and error criteria. Controller realization. Case studies. Prerequisite: Mechanical Engineering 315.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 450

Structural Mechanics.

Introduction to matrix algebra; Formulation of stiffness and flexibility matrices. Application to indeterminate frames, beams, rings, and arches. Numerical techniques for the solution of isotropic and anisotropic plates. Introduction to the finite element method of analysis. Problems will be computer-oriented. Prerequisite: Mechanical Engineering 305.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 451

Advanced Strength Analysis.

Development of advanced stress analysis techniques such as beams on elastic foundation, membranes of revolution, rotating disks, axisymmetric shrink fit, thermal stress, torsion of noncircular members, and introduction to plate-bending theory to help solve design problems. Prerequisites: Mechanical Engineering 305, and Mathematics 301.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 452

Advanced Vibrations.

Brief review of systems with one and two degrees of freedom. Rayleigh's method. Application of Lagrangian and matrix methods to discrete systems with many degrees of freedom; normal mode theory; vibrations of finite continua; solution methods and mathematical properties. Numerical and computer methods. Sensitivity analysis. Applications to machines and structures. Prerequisite: Mechanical Engineering 315.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 453

Finite Element Methods in Mechanical Engineering.

Formulation of finite element characteristics using energy methods. Convergence criteria. Consistent load and mass matrices. In-plane and axisymmetric analysis using simple and higher-order triangular and quadrilateral elements. Finite element analysis of plate-bending problems. Isoparametric concepts and formulation; applications to two-and three-dimensional stress analysis. Topics from the following areas will be chosen as time allows: buckling and vibration studies using discrete element techniques; finite element applications in fluid flow and heat transfer. Prerequisite: Mechanical Engineering 450 or permission of instructor.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 454

Advanced Dynamics.

Orthogonal coordinate systems and their transformations. Particle kinematics in inertial and noninertial rotating coordinate systems. Dynamics of systems of particles and rigid bodies. Virtual work and generalized coordinates. Lagrange's equations and Hamilton's principle for holonomic and non-holonomic systems with applications. Lagrange multipliers. Prerequisites: Mechanical Engineering 315.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 456

Mechanics of Composite Materials.

Introduction to the mechanics of laminated filamentary composites. Prediction of stiffness and strength of laminated plates. Applications. Prerequisites: Mechanical Engineering 305 and Mathematics 301 or equivalents.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 463

Advanced Heat Transfer.

Topics in conduction, convection and radiation heat transfer. Numerical methods, phase change, boundary layer principles, gas and solar radiation, combined heat and mass transfer. Prerequisite: Mechanical Engineering 363; Co-requisite: Mathematics 401.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 505

Theory of Plates and Shells.

Mathematical formulations of plate equations from elasticity equations. Plates subjected to lateral loads. Solutions by means of Fourier series and integrals. Introduction to variational calculus and methods by Ritz, Galerkin, and Kantorovich. Nonlinear elasticity equations as applied to the von Karman equations. Instability and vibration of plates. Membrane and bending theory of shells. Applications related to spherical and cylindrical shells. Prerequisites: Mathematics 401 and Mechanical Engineering 451D or permission of instructor.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 510

Theoretical Fluid Mechanics.

The mathematical treatment of the dynamics of ideal fluids. Continuity and motion equations, stream and potential functions, vorticity, circulation. Methods of singularities, separation of variables, and conformal mapping. Jourkowski and Schwartz Christoffel transformations. Calculation of pressure distributions and forces on bodies and other applications. Prerequisites: Mathematics 401 and Mechanical Engineering 410
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 511

Fixed and Rotary Wing Aircraft Principles.

Fundamentals of aerodynamics and fluid flow concepts for developing fixed wing and rotary wing aircraft performance. Two-dimensional aerodynamic characteristics of airfoils and their application in both airplane and helicopter design. Means for augmenting lift and the effects of various types of high lift devices on the aerodynamic characteristics. Aerodynamics of finite aspect ratio wings leading to the fundamentals of airplane performance calculation. Theory of helicopter hovering and vertical flight including autorotation and the aerodynamic behavior of the rotor and helicopter in forward flight. Introduction to airplane and helicopter stability. Prerequisites: Mechanical Engineering 410 and a course in control theory or permission of instructor.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 513

Gas Turbines I.

Introduction to gas turbine fundamentals with emphasis on thermodynamics, cycle analysis, energy transfer in turbomachinery, component performance and component matching. Discussion of various gas turbine engine types including turboshaft (non-regenerative and regenerative cycles), turbojet, turbofan and turboprop. Aero/thermodynamic behavior of components: compressor, turbine, combustor, diffuser, and nozzle. Background to assess characteristics and performance of various gas turbine types. Prerequisite: Mechanical Engineering 358 or permission of instructor.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 514

Advanced Gas Dynamics.

Review of one-dimensional gas dynamics. Continuous unsteady one-dimensional flows of perfect fluids. Unsteady flows of perfect fluids involving discontinuities. Spatial supersonic steady flows of perfect fluids. Selected topics in viscous and heat-conducting compressible flows and boundary layers. Prerequisites: Mechanical Engineering 358 and Mechanical Engineering 410.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 560

Helicopter Aerodynamics and Performance.

Rotor aerodynamics: blade element theory, momentum theory, Goldstein's theory, modem vortex theories. Comparison of theory and experiment in hover, transition and high speed flight, rotor blade motion: articulated and hingeless Rotors. Helicopter performance estimation in level flight, autorotation and climb; control required to trim in steady flight. Prerequisite: Mechanical Engineering 511.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 566

Turbomachinery.

Design and performance prediction of turbines and compressors including axial and radial turbomachinery stages. Simplified models: axisymmetric flow rotating and stationary passages, free vortex theory, blade element design, loss prediction and cooling. Multistage compressor preliminary design, stacking, instability and surge. Prerequisite: Mechanical Engineering 513.
3 lecture hours; 3 semester hours

MECHANICAL ENGINEERING 567

Gas Turbines II.

An introduction to mechanical design aspects of critical gas turbine elements. Centrifugal, thermal and vibratory stresses in blades and discs; analysis of shaft critical speeds. Design impact of material selection on creep rupture and low cycle fatigue life. Combustor design including sizing, cooling, ignition, stability and pollutant formation. Engine controls: hydromechanical, pneumatic and electronic to provide safe engine operation during transients. Physical phenomena of turbomachinery and jet noise generation and design criteria to reduce noise emission. Prerequisite: Mechanical Engineering 513.
3 lecture hours; 3 semester hours

SPECIAL STUDIES AND RESEARCH

MECHANICAL ENGINEERING 497

Advanced Problems in Mechanical Engineering.

Lecture hours, semester hours and topics to be arranged.

MECHANICAL ENGINEERING 596

Master's Project.

14 semester hours

MECHANICAL ENGINEERING 598

Thesis in Mechanical Engineering.

Lecture hours, semester hours and topics to be arranged.
1-6 semester hours

Naturopathic Medicine

Basic Sciences

BASIC SCIENCES 511

Anatomy I.

This course provides an in depth study of the macroscopic human anatomy – the structure of the human body and its relationships, naming its parts. It includes laboratory with prosection of human cadavers as an aid to learning and remembering the interrelationships of the parts of the human body.
3 lecture hours, 3 laboratory hours, 4.5 semester credits

BASIC SCIENCES 521
Anatomy II.
This course is a continuation of Anatomy I and includes basic neuroscience and neuroanatomy with a laboratory addressing the structure and function of the central and peripheral nervous systems. Prerequisites: BS511, BS512.
3 lecture hours, 3 laboratory hours, 4.5 semester credits

BASIC SCIENCES 512
Histology.
This course is designed to provide the student with an understanding of microscopic human anatomy and its relationship to the cellular, tissue and organ level.
3 lecture hours, 2 laboratory hours, 4 semester credits

BASIC SCIENCES 513
Embryology I.
Embryology covers the gametogenesis, fertilization, structural development from the zygote to birth. This course correlates the embryological development with other courses offered in semester I. Normal development, clinical correlations and common congenital abnormalities are presented.
1 lecture hour, 1 semester credit

BASIC SCIENCES 523
Embryology II.
This course is a continuation of Embryology I. It correlates the embryological development with the anatomy courses offered in semester II. Prerequisites: BS511, BS512, BS513.
1 lecture hour, 1 semester credit

BASIC SCIENCES 514
Biochemistry.
This course is designed to provide the student with an understanding of the biochemical principles involved in maintaining functional integrity of the body through energetics and the principles involved in nutritional balance.
3 lecture hours, 2 laboratory hours, 4 semester credits

BASIC SCIENCES 515
Physiology I.
This course emphasizes the function of cellular structures which regulate homeostasis as well as their role in cell division and genetic control of protein synthesis. Emphasis is placed on the role of the cell membrane in the control of cellular events, particularly the propagation of action potentials and their role in muscle contraction. The effects of physiology on the hormones, their role in homeostasis, and functional changes associated with homeostasis are considered.
2 lecture hours, 2 laboratory hours, 3 semester credits

BASIC SCIENCES 525
Physiology II.
This course is a study of the physiology at the organ and systems level. Included is the study of the circulatory, respiratory, renal, cardiovascular, gastrointestinal, and urogenital systems. Also included is the study of the endocrine system and its interrelationships with various organs and systems. There is an integration of normal physiology with pathophysiology and clinical concepts. Prerequisites: BS512, BS514, BS515.
4 lecture hours, 2 laboratory hours, 5 semester credits

BASIC SCIENCES 522
Microbiology.
This course introduces the student to the basic concepts of microbiology with emphasis on the structure, growth, metabolism and genetics of bacteria. Host-parasite relationships of representative bacterial, fungal, viral, and protozoan pathogens are examined. A survey of microbial diseases includes modes of transmission, symptoms, diagnosis, physical and chemical methods of disinfection, sterilization and treatment. Presentations include lecture, laboratory and case studies.
4 lecture hours, 2 laboratory hours, 5 semester credits

Botanical Medicine

BOTANICAL MEDICINE 531E
Medicinal Plants I.
This course covers basic plant botany and local plant identification, harvesting and drying techniques and preparation of dry and fresh botanical tinctures, salves and other preparations. Emphasis on this course is on learning to identify plants in their native state and developing an appreciation not limited to seeing them as medical agents. Elective.
2 lecture hours, 2 semester credits

BOTANICAL MEDICINE 611
Botanical Medicine I.
This course comprises a detailed survey of plants and plant preparations used in naturopathic practice, integrating traditional herbal knowledge with modern pharmacological research. The pharmacognosy, pharmacodynamics, toxicology, and therapeutics of each plant are considered. Prerequisites: BS525, CS521
3 lecture hours, 3 semester credits

BOTANICAL MEDICINE 621
Botanical Medicine II.
This course is a continuation into the second semester of Botanical Medicine I. Prerequisite: BM611.
3 lecture hours, 3 semester credits

BOTANICAL MEDICINE 631E
Botanical Medicine III.
This course is an introduction to the emerging knowledge of the traditional pharmacopoeia of other cultures. Elective. Prerequisite: BM621.
2 lecture hours, 2 semester credits

BOTANICAL MEDICINE 632E
Botanical Medicine IV.
This course is the study of the advanced Botanical Materia Medica as practiced by the Eclectic School of Medicine throughout most of the twentieth century. It comprises an in depth study of the indications for the clinical use of botanical preparations. Prerequisite BM621. Elective.
2 lecture hours, 2 semester credits

Clinical Nutrition

CLINICAL NUTRITION 621
Nutrition I.
This course provides the foundation for therapeutic nutrition. It explores the biochemistry of the macronutrients as well as the known vitamins and minerals in detail. Toxicities, deficiencies, therapeutic uses and appropriate doses are examined. An assessment of the dietary needs and the

application of therapeutic nutrition in treating individual diseases and syndromes is also taught. Prerequisites: BS525. BS514, CS611.
4 lecture hours, 4 semester credits

CLINICAL NUTRITION 711
Nutrition II.
This course focuses on food as medicine. Therapeutic diets, dietary manipulation and supplementation are discussed in detail. Emphasis is on restoring normal physiological function and structural integrity by providing the normal components of living systems. Prerequisite: NT621.
4 lecture hours, 4 semester credits

Clinical Sciences

CLINICAL SCIENCES 521
Pathology I.
This course is a study of the pathophysiological process and how this process alters the gross, microscopic, and clinical manifestations of disease. Basic pathological processes of inflammation, repair, degeneration, necrosis, immunology, and neoplasia is presented. Laboratory includes the study of gross and microscopic changes as well as clinical presentations of various diseases and functional disturbances. Prerequisites: BS511, BS512, BS513, BS515.
2 lecture hours, 2 laboratory hours, 3 semester credits

CLINICAL SCIENCES 611
Pathology II.
This course is a continuation of the study of the pathological processes of various diseases. This course emphasizes the pathological basis of systemic diseases of the cardiovascular, respiratory, gastrointestinal, urogenital, endocrine, hepatobiliary, renal and pancreatic systems. The gross, microscopic, and clinical manifestations of various disease processes are presented. Prerequisite: CS521.
4 lecture hours, 2 laboratory hours, 5 semester credits

CLINICAL SCIENCES 612
Clinical/Physical Diagnosis I.
This course covers the techniques for physical examination of various systems of the body including a developing appreciation for normal variations and abnormalities associated with various disease states. The student is taught to recognize the signs and symptoms of common diseases, laboratory evaluation for further assessment and procedures involved in diagnosing the patients condition. Laboratory section of this course focuses on history taking, physical examination, and charting skills. Prerequisites: BS521, BS523, BS525, CS521.
5 lecture hours, 2 laboratory hours, 6 semester credits

CLINICAL SCIENCES 622
Clinical/Physical Diagnosis II.
This course is a continuation of Physical/ Clinical Diagnosis I. Prerequisite: CS612.
5 lecture hours, 2 laboratory hours, 6 semester credits

CLINICAL SCIENCES 613
Laboratory Diagnosis I.
This course introduces the student to the appropriate use and interpretation of laboratory tests. Prerequisites: BS514, BS525, CS521.
3 lecture hours, 3 semester credits

CLINICAL SCIENCES 623
Laboratory Diagnosis II.
This course is a continuation of Laboratory Diagnosis I with emphasis on the interpretation of laboratory data in the assessment of disease conditions and the practical application and use of laboratory methods. Prerequisite: CS613.
2 lecture hours, 2 laboratory hours, 3 semester credits

CLINICAL SCIENCES 614
Public Health/Epidemiology.
This course covers the current environmental and public health concerns and issues. The course integrates health with diet, air and water pollutants, noise, and substance abuse, compares community hygiene and industrial hygiene, defines epidemiology, and recognition of major communicable and non-communicable diseases. Prerequisite: BS522.
3 lecture hours, 3 semester credits

CLINICAL SCIENCES 615
Clinical Forum I.
This course explores the clinical applications of the basic sciences and the clinical courses taught concurrently in this semester. Case presentations and clinical skills are emphasized through a problem based learning format using naturopathic principles as the foundation.
2 laboratory hours, 1 semester credit

CLINICAL SCIENCES 625
Clinical Forum II.
This course is a continuation of Clinical Forum I and explores the clinical applications of the basic and clinical sciences being taught concurrently in this semester.
2 laboratory hours, 1 semester credit

CLINICAL SCIENCES 621
Diagnostic Imaging I.
The focus in this course is on the radiographic anatomy and radiographic findings of common disorders, and on differential diagnosis and clinical correlation. In addition, the basics of ultrasonography, nuclear medicine, magnetic resonance imaging and computed tomography and their proper use in diagnosis are discussed. Prerequisites: CS612.
2 lecture hours, 2 semester credits

CLINICAL SCIENCES 711
Diagnostic Imaging II.
This course is a continuation into the second semester of Diagnostic Imaging I. Prerequisite: CS621.
2 lecture hours, 2 semester credits

CLINICAL SCIENCES 624
Immunology.
This course covers the basic cellular components and physiological and chemical functioning of the immune system with emphasis on its role in protecting the host. Immune deficiency syndromes and autoimmune diseases are discussed. Prerequisites: BS525, BS522
2 lecture hours, 2 semester credits

CLINICAL SCIENCES 626
Emergency Procedures.
In this course students are taught to recognize and respond to medical emergencies with naturopathic techniques, and appropriate decisions for referral. Students are taught and may become certified in cardiopulmonary resuscitation (CPR). Prerequisites: BS521, BS525.
2 lecture hours, 2 semester credits

CLINICAL SCIENCES 712

Medical Genetics.

This course covers the basis, the diagnosis, and the transmission of chromosomal and genetic disorders.The role of genetics and disease and the pre-natal diagnosis of genetic and chromosomal abnormalities are emphasized. Prerequisites: BS515, CS521.
1 lecture hour, 1 semester credit

CLINICAL SCIENCES 721

Pharmacology I.

The basic pharmacology of the major categories of drugs is studied. The therapeutic uses, adverse reactions, side effects, contraindications, toxicology, and drug interactions are covered. Prerequisites: CS622, CS623.
3 lecture hours, 3 semester credits

CLINICAL SCIENCES 811

Pharmacology II.

This course examines the most common pharmaceutical agents in clinical practice and the ones most likely to be encountered in a clinical setting in general practice. It reviews antibiotics, antimicrobials, both steroidal and non-steroidal, anti inflammatories, chemotherapeutic agents, hormones, and commonly prescribed medications. Prerequisite: CS721.
1 lecture hour, 1 semester credit

CLINICAL SCIENCES 812

Environmental Medicine.

This course focuses on the effects of pollutants in the home, workplace and elsewhere in the environment. Diagnosis and treatment of health conditions caused by these pollutants is discussed with special emphasis on treating the chemically sensitive patient or those with environmental illness. Prerequisites: CS614, CS622
1.5 lecture hours, 1.5 semester credits

Homeopathic Medicine

HOMEOPATHIC MEDICINE 621

Homeopathy I.

This course introduces the students to the principles and philosophy of classical homeopathy including the concept of vitalism, the concept of vital force in health and disease, the nature of medicinal preparations and ways to effect the vitality of the patient. Prerequisites: PP511, CS521.
2 lecture hours, 2 semester credits

HOMEOPATHIC MEDICINE 711

Homeopathy II.

This course will continue the examination of homeopathy with emphasis on the concept of constitutional prescribing, case taking, and analysis. Students will continue their discussion and understanding of basic homeopathic remedies. Prerequisite: HM621
3 lecture hours, 3 semester credits

HOMEOPATHIC MEDICINE 721

Homeopathy III.

Students will continue to understand the hierarchy of symptoms as they are expressed in the repertory and will begin to recognize the keynote symptoms of various remedies and be able to distinguish among them. The differences between constitutional and acute prescribing will be discussed. Prerequisite: HM711.
3 lecture hours, 3 semester credits

HOMEOPATHIC MEDICINE 731E

Homeopathy IV: Advanced Materia Medica I.

This elective course will focus on specific disease states, the most common symptoms and the related rubrics in the homeopathic lexicon. Students will come to know common indicated remedies and how to differentiate among them. Elective. Prerequisite: HM721.
2 lecture hours, 2 semester credits

HOMEOPATHIC MEDICINE 732E

Homeopathy V: Advanced Materia Medica II.

This course is a continuation of HM731E with emphasis on the homeopathic treatment of specific disease states. Elective.
2 lecture hours, 2 semester credits

HOMEOPATHIC MEDICINE 733E

Homeopathy VI: Advanced Prescribing I.

This course will focus on common remedies that are indicated for various disease states and the differentiation among them. Emphasis will be on advanced case taking skills. Elective. Prerequisite: HM732E
2 lecture hours, 2 semester credits

HOMEOPATHIC MEDICINE 734E

Homeopathy VII. Advanced Prescribing II.

This course is a continuation of HM733E with emphasis on case taking skills. Elective. Prerequisite: HM733E.
2 lecture hours, 2 semester credits

Naturopathic Obstetrics

NATUROPATHIC OBSTETRICS 711

Obstetrics I.

This course addresses itself to healthcare appropriate to the special circumstances of pregnancy. Topics covered include diagnosis of pregnancy, pre-natal care, therapeutics for early pregnancy, management of spontaneous abortion, infertility, an overview of normal and complicated labor and birth, and the post-partum care of mothers and infants. Prerequisites: CS611, CS622, CS623.
2 lecture hours, 2 semester credits

NATUROPATHIC OBSTETRICS 731E

Obstetrics II.

This is the first course in the specialty training sequence for naturopathic obstetrics. Prenatal care in assisting the maintenance of well being for the mother and fetus is the focus of this course. The screening skills introduced in Obstetrics I are expanded upon. Complications of pregnancy are studied along with the appropriate treatment ranging from naturopathic therapeutics to referral for high risk cases. Elective. Prerequisite: OB711.
2 lecture hours, 2 semester credits

NATUROPATHIC OBSTETRICS 732E

Obstetrics III.

This course prepares the student to provide support and safety to the birth mother through labor and the birth of the new baby. Normal labor and birth are studies along with techniques of monitoring the fetal maternal condition and the progress of labor. Complications of labor and birth are examined. The hands-on skills necessary to respond to birthing situations are discussed. Elective. Prerequisite: OB731E.
2 lecture hours, 2 semester credits

NATUROPATHIC OBSTETRICS 733E

Obstetrics IV.

This course is a study of the third stage of birth, delivery of the placenta, and concludes with the six weeks of postpartum. The effects of the resolution of pregnancy

and the beginning of motherhood on a woman's body, mind and spirit are studied. Students are taught practical skills such as perineal repair, bladder catheterization, intravenous insertion, blood loss estimation, management of postpartum hemorrhage, and breast feeding support, as well as an appreciation for the personal and familial transition during this period. Elective. Prerequisite: OB732E.
2 lecture hours, 2 semester credits

NATUROPATHIC OBSTETRICS 734E
Obstetrics V.
This course addresses the management of the mature fetus and the newborn to twelve weeks of age. It includes a review of fetal development, transitional anatomy and physiology in the neonate, normal newborn assessment, and screening and treatment for newborn anomalies and special needs. Elective. Prerequisite: OB733E
2 lecture hours, 2 semester credits

NATUROPATHIC OBSTETRICS 735E
Obstetrics VI.
The legal malpractice issues relevant to practicing naturopathic obstetrics and/or midwifery in different states is discussed as well as the requirements for licensure. Elective. Prerequisite: OB734E
1 lecture hour, 1 semester credit

Naturopathic Practice/ Organ Systems

NATUROPATHIC PRACTICE 711
Gynecology.
The focus of this course is the female genital system and the diagnosis and naturopathic treatment of conditions associated with it. Prerequisite: CS623
3 lecture hours, 3 semester credits

NATUROPATHIC PRACTICE 721
Pediatrics.
This course involves the recognition and diagnosis of the conditions of the pediatric patient encoutered in a general naturopathic practice. Naturopathic therapy and management of these disorders are discussed along with the appropriate use of referral. Prerequisites: CS622, CS623.
2 lecture hours, 2 semester credits

NATUROPATHIC PRACTICE 722
Cardiology.
The pathophysiology, diagnosis and naturopathic treatment of conditions affecting the heart and circulatory system are discussed. Prerequisites: CS622, CS623.
2 lecture hours, 2 semester credits

NATUROPATHIC PRACTICE 723
Gastroenterology.
This course examines the digestive tract and associated organs, and disorders associated with it. The physical examination, imaging, and laboratory techniques necessary to understand and diagnose these disorders are discussed along with the naturopathic treatment. Prerequisites: CS622, CS623.
2 lecture hours, 2 semester credits

NATUROPATHIC PRACTICE 724
Minor Surgery.
This course is designed to teach students to diagnose those conditions that are safely treated by office surgery and the principles and practical techniques involved in the performance and follow up of office surgical procedures. Prerequisites: CS622, CS623
1.5 lecture hours, 1 laboratory hour, 1.5 semester credits

NATUROPATHIC PRACTICE 731E
Advanced Minor Surgery.
This course is designed to give the student more practical experience in minor surgery with various suturing techniques. Elective. Prerequisite: NP724.
1 lecture hour, 2 laboratory hours, 2 semester credits

NATUROPATHIC PRACTICE 811
Eye, Ear, Nose and Throat.
The primary focus in this course is in the diagnosis and naturopathic treatment of EENT problems. An understanding of potential emergency situations and others needing referral is developed. Prerequisites: CS622, CS623
1.5 lecture hours, 1.5 semester credits

NATUROPATHIC PRACTICE 812
Endocrinology.
This course focuses on the interaction of the various hormonal systems in the body and the disorders which may arise therefrom. Naturopathic treatment of common hormonal imbalances is discussed. Prerequisites: CS622, CS623.
1.5 lecture hours, 1.5 semester credits

NATUROPATHIC PRACTICE 813
Neurology.
This course constitutes a review of the neurological exam with emphasis of the diagnosis of neurological conditions. The naturopathic treatment and management of diseases of the nervous system are discussed. Prerequisites: CS622, CS623.
1.5 lecture hours, 1.5 semester credits

NATUROPATHIC PRACTICE 821
Geriatrics.
This course covers the aging process and the medical problems of the elderly patient. Diagnosis and therapies unique to this population are discussed. Emphasis is on the management or slowing of degenerative changes. Prerequisites: CS622, CS623.
1 lecture hour, 1 semester credit

NATUROPATHIC PRACTICE 822
Urology/Proctology.
This course covers the diagnosis and naturopathic treatment of disorders of the urinary system and the anal rectal region. The treatments of cystitis, urethritis, various forms of nephritis, urinary tract stones and an examination and treatment of the male genital system is included in the urology section. The treatment of internal and external hemmorhoids, proctitis and other anal/rectal conditions is covered in the proctology section. Prerequisites: CS622, CS623.
1.5 lecture hours, 1.5 semester credits

NATUROPATHIC PRACTICE 823
Oncology.
This course covers the diagnostic, prognostic and preventative and epidemiological information for common cancers. Various theories of cancer are discussed as well as both conventional and non-conventional treatments.Prerequisites: CS622, CS623.
1.5 lecture hours, 1.5 semester credits

NATUROPATHIC PRACTICE 824
Dermatology.
The diagnosis and treatment of diseases which manifest in skin lesions are discussed. Naturopathic treatment and prevention are taught. Prerequisites: CS622, CS623.
1.5 lecture hours, 1.5 semester credits

Naturopathic Principles and Practice

PRINCIPLES AND PRACTICE 511

Naturopathic History and Philosophy.

This course is a study in the history of medicine and the roots of the principles and philosophy of vitalism in therapeutic application. The basic philosophical concepts and precepts of modern naturopathic medicine are discussed.
2 lecture hours, 2 semester credits

PRINCIPLES AND PRACTICE 521

Naturopathic Philosophy and Therapeutics.

This is a continuation of Naturopathic History and Philosophy. The philosophical principles of empirical medicine with an emphasis on vitalism are discussed in detail with appropriate therapeutic examples. Prerequisite: PP511.
2 lecture hours, 2 semester credits

PRINCIPLES AND PRACTICE 721

Practice Management I.

Students are taught the current procedural practices for the operation of a private practice. In addition, the practical aspects of operating a practice as a small business are discussed. Students are encouraged to begin thinking about their personal career path in naturopathic medicine. Prerequisites: CS611, CS622.
2 lecture hours, 2 semester credits

PRINCIPLES AND PRACTICE 811

Practice Management II.

This course introduces the student to the business procedures and practice used in the successful operating of a business. Prerequisite: PP721.
1.5 lecture hours, 1.5 semester credits

PRINCIPLES AND PRACTICE 821

Medical Jurisprudence and Ethics.

This course covers the basics of law as it applies to medical practice. Informed consent, confidentiality and professional liability are discussed in detail. Naturopathic licensing laws in various jurisdictions are contrasted and compared along with an in depth review of the practice act in Connecticut. Prerequisite: PS712.
1.5 lecture hours, 1.5 semester credits

Oriental Medicine

ORIENTAL MEDICINE 611

Chinese Medicine I: Fundamentals.

This course introduces the philosophical basis of classical Chinese medicine, specifically the concepts of holism, duality, dynamism, and spiritual materialism. The purpose of the course is to allow the student to integrate the basic philosophical concepts of vitalism which are found in Chinese Medicine, to be conversant with this system of medicine and to integrate these basic principles into naturopathic practice. Prerequisites: BS521, BS525, CS521.
4 lecture hours, 4 semester hours

ORIENTAL MEDICINE 631E

Chinese Medicine II: Diagnosis.

This course is designed to apply the universal concepts of traditional Chinese thought and cosmology to the microcosm of the human body. The course introduces the major systems of Chinese diagnosis, particularly the organ network (zangfu) and six confirmation (liuging) approaches. Elective. Prerequisite: OM611.
2 lecture hours, 2 semester credits

ORIENTAL MEDICINE 632E

Chinese Medicine III: Advanced Diagnosis.

This course is a continuation of Chinese Medicine II and prepares the student to observe facial color, tongue, hair, nails, body fluids, and pulses in order to make a basic analysis according to the diagnostic parameters of classical Chinese medicine. Elective. Prerequisite: OM631E.
2 lecture hours, 2 semester credits

ORIENTAL MEDICINE 633E

Chinese Medicines IV: Therapeutics.

This course focuses on the therapeutic applications of Chinese medicine. Students will be introduced to the broad pallet of classical treatment modalities (herbs, acupuncture, moxibustion) and their specific indications. Examples of common diseases will be discussed. Elective. Prerequisite: OM632E.
2 lecture hours, 2 semester credits

ORIENTAL MEDICINE 634E

Chinese Medicine V: Materia Medica.

This course will introduce the basic principles of Chinese herbal medicine and traditional formula design. Emphasis will be given to the most common herbs and formulas used in traditional practice. Elective. Prerequisite: OM633E
2 lecture hours, 2 semester credits

Physical Medicine

PHYSICAL MEDICINE 511

Living Anatomy I: Palpation.

This lecture and laboratory course addresses the biomechanics and assessment procedures of the spinal and pelvic joints. The student is introduced to the concepts of biomechanics as they relate to the kinematics and kinetics of the spine and pelvis and the structure and function of the tissues of the musculoskeletal system. This information is coupled with the diagnostic tools of static and motion palpation as they pertain to the assessment of spinal joint functioning.
1 lecture hour, 2 laboratory hours, 2 semester credits

PHYSICAL MEDICINE 521

Living Anatomy II: Massage.

In this course students are introduced to the palpation and assessment of the soft tissue with emphasis on the muscular system. Palpation of the viscera where possible is also involved. Basic massage technique is taught as a way to understand muscular relationships. Prerequisite: BS511.
1 lecture hour, 1 laboratory hour, 1.5 semester credits

PHYSICAL MEDICINE 611

Hydrotherapy.

This course introduces students to the physiological principles underlying the therapeutic use of water, heat, and cold. In the laboratory portion of this course students learn procedures by administering and receiving treatments and determining appropriate applications. Prerequisites: BS521, BS525.
1 lecture hour, 2 laboratory hours, 2 semester credits

PHYSICAL MEDICINE 621

Physiological Therapeutics.

This course is an introduction to the

physics and clinical use of heat, cold, high-volt galvanism, interferential current, low-volt galvanism, ultrasound, electrical muscle stimulation, diathermy, and paraffin. The student is instructed on the development of a clinical management plan utilizing adjunctive therapies. Prerequisites: BS525, CS611.
2 lecture hours, 2 laboratory hours, 3 semester credits

PHYSICAL MEDICINE 711
Naturopathic Manipulative Therapeutics I.
This course describes the history and rationale of naturopathic manipulative therapy. The biomechanics, pathophysiology, diagnosis, and the manipulative and complimentary therapies for conditions of and involving the thoracic spine and rib cage, the thoracolumbar junction, the lumbar spine, pelvis and coccyx are studied. Orthopedic examination and mobility testing are discussed. Prerequisites: PM511, PM521, CS611, CS622.
2 lecture hours, 4 laboratory hours, 4 semester credits

PHYSICAL MEDICINE 721
Naturopathic Manipulative Therapeutics II.
This course is a continuation of Naturopathic Manipulative Therapeutics I and concentrates on the manipulative and complimentary therapies for the treatment of the cervical spine and cervicothoracic junction. The biomechanics, motion palpation and manipulation of the extremities is also addressed. Prerequisite: PM721
2 lecture hours, 4 laboratory hours, 4 semester credits

PHYSICAL MEDICINE 821
Preventative/Therapeutic Exercise.
This course provides an overview of exercise as a preventative and therapeutic tool. Students are taught to perform a fitness assessment and describe and monitor exercise programs for persons with certain disease conditions. Prerequisite: PM721
1 lecture hour, 1 semester credit

PHYSICAL MEDICINE 822
Orthopedics/Sports Medicine.
The diagnosis and treatment of disorders involving the skeletal system which can be safely treated in a general practice office setting are discussed. Students practice taping, splinting and casting techniques. Prerequisite: PM721
1.5 lecture hours, 1.5 semester credits

Psychology

PSYCHOLOGY 511
Physician Heal Thyself.
This course is designed to help students understand the stress, potential health effects and personal needs of their participation in a professional academic curriculum. This course emphasizes stress reduction, time management, and self-assessment.
1 lecture hour, 1 semester credit

PSYCHOLOGY 521
Communication Skills.
This course introduces students to communication skills to effectively interact with patients as well as small and large groups.
2 lecture hours, 2 semester credits

PSYCHOLOGY 711
Counseling Skills and Technique.
This course introduces the predominant holistic counseling theories and interventions through experiential study. Counseling skills with reference to actual case analysis are developed. Prerequisite: PS521.
1 lecture hour, 1 laboratory hour, 1.5 semester credits

PSYCHOLOGY 712
The Doctor/Patient Relationship.
This course deals with the issues which arise among professional care givers. It includes an examination of ethical issues, confidentiality, development of trust, setting appropriate boundaries, and dealing with patients with chronic and life-threatening illnesses. Prerequisite: PS711.
0.5 lecture hours, 1 laboratory hour, 1 semester credit

PSYCHOLOGY 721
Psychological Assessment.
Topics in medical psychiatry including psychopathology, psychopharmacology, and the assessment and treatment of psychological disorders are discussed. Prerequisite: CS611.
1.5 lecture hours, 1.5 semester credits

PSYCHOLOGY 811
Addictions and Disorders.
This course examines the diagnosis and treatment of specific addictions and disorders from a psychological, physiological and naturopathic point of view. Alcoholism, drug abuse, eating disorders and smoking are among the topics that are covered. Prerequisite: PS721.
1 lecture hour, 1 semester credit

Research

RESEARCH 511
Research Methodology/Statistics.
This course introduces students to research principles, methodologies, instrumentation, statistics, and computer based searches.
2 lecture hours, 2 semester credits

RESEARCH 811
Thesis I.
With the advice and guidance of their faculty research advisor, students plan and implement a research project of sufficient complexity and scope in an appropriate subject area, in conformity with guidelines adopted by the Research Committee. Prerequisite: RS511.
1 lecture hour, 1 semester credit

RESEARCH 821
Thesis II.
Students submit and present their research in conformity with guidelines adopted by the Research Committee. Prerequisite: RS811.
1 lecture hour, 1 semester credit

Clinical Education

CLINICAL EDUCATION 711
Clinical Education I.
Students begin to gain practical clinical skills by working under the supervision of licensed naturopathic physicians and other healthcare providers. Students learn through observation and are given limited responsibility in the clinical setting during this semester. Prerequisite: Clinic Entrance Exam.
8 laboratory hours, 4 semester credits

CLINICAL EDUCATION 721

Clinical Education II.

This is a continuation of the clinical work begun in Clinical Education I and involves the ongoing development of clinical skills and case management under supervision of licensed physicians. Students gradually assume responsibility as secondary care givers under the supervision of licensed physicians. Prerequisite: CE711.
8 laboratory hours, 4 semester credits

CLINICAL EDUCATION 731

Clinical Education III.

Clinic interns continue to perfect their clinical skills in preparation for having primary care responsibilities for patients for the following semester. Prerequisite: CE721.
8 laboratory hours, 4 semester credits

CLINICAL EDUCATION 811

Clinical Education IV.

Interns assume the role of primary care giver under the direct supervision of a licensed physician. Physical examination, diagnosis assessment and treatment skills are honed while specific performance objectives of clinical training are met. Prerequisite: CE731
24 laboratory hours, 12 semester credits.

CLINICAL EDUCATION 821

Clinical Education V.

In this final semester of clinical training students examine, diagnose and treat patients in preparation for providing primary care as a naturopathic physician. Prerequisite: CE811.
24 laboratory hours, 12 semester credits

Nutrition

NUTRITION 481

Nutritional Science.

The following nutritional science courses are offered only in the master's program in Nutrition. This program is available on the main campus.

560A Physiologic Basis of Nutrition
560B Biochemistry of Nutrition
560C Vitamin and Mineral Metabolism
560D Clinical Biochemistry
560E Assessment of Nutritional Status
560F Nutritional Therapeutics
560H Developmental Nutrition
560J Research in Nutrition
560L Nutrition and Exercise
560M Biostatistics
560N Pathology of Nutritional Diseases
560Q Issues in Nutrition and Health Care

BIOLOGY 560A

Pathophysiologic Basis of Nutrition.

A study of the underlying mechanisms of disease and the complex interrelationships between critical systems including respiratory, urinary cardiovascular, digestive, nervous and endocrine. Lectures will include fluid and electrolyte imbalances, acid and base imbalances, inflammation, hypersensitivity, infection, necrosis, and neoplasms. The influence of various nutrients on systemic function will be stressed.
4 semester hours

NUTRITION 560B

Biochemistry of Nutrition.

A lecture course covering the static and dynamic aspects of the biochemistry of the carbohydrates, lipids, amino acids, proteins, nucleic acids, cations, anions, enzyme kinetics, hormones and vitamins in the normal healthy human. Integration and control mechanisms of the various metabolic pathways are particularly emphasized. Prerequisite: Introduction to Biochemistry.
4 semester hours

NUTRITION 560C

Vitamin and Mineral Metabolism.

Basic and clinical aspects of nutrient homeostasis concentrating on vitamin and mineral metabolism at the cellular and tissue level. Metabolic role of vitamins and minerals; specific functions, requirements, sources, assay methods, effects of deficiencies and excesses for each vitamin and mineral. Prerequisite: Nutrition 560B.
4 semester hours

NUTRITION 560D

Clinical Biochemistry.

A lecture course dealing with the biochemistry of disorders arising from acid/base imbalance and the abnormal metabolism of the carbohydrates, lipids, proteins, nucleic acids, bile pigments, vitamins, and hormones. Prerequisite: Nutrition 560B.
3 semester hours

NUTRITION 560E

Assessment of Nutritional Status.

Clinical and laboratory analytical procedures for evaluation of nutrient status, including blood and other tissue analysis, dietary records and questionnaires, case history, physical examination, anthropometric methods, etc. Prerequisites: Nutrition 560B, 560D.
3 semester hours

NUTRITION 560F

Nutritional Therapeutics.

Survey of diseases that have primary or secondary nutritional implications and related nutritional strategies. For each disease covered, the etiology, pathology, epidemiology, and prevailing methods of treatment will be presented and the mechanism of action of various nutritional therapies will be explored. The role of nutrition in support of other treatments and modalities will also be considered. Prerequisites: Nutrition 560B, 560C, and 560D.
4 semester hours

BIOLOGY 560H

Developmental Nutrition.

Nutritional considerations and health related concerns of growth and development. Special attention will be given to pregnancy/lactation, fetal/neonatal, and infant/pediatric stages of development. Nutritional needs of the adolescent and elderly will be discussed.
3 semester hours

NUTRITION 560J

Research in Nutrition.

Independent research project with faculty guidance, based on liturature survey or original reasearch. Project approval is required. Prerequisite: Advanced standing, permission of advisor.
3 semester hours

NUTRITION 560L

Nutrition and Exercise.

An instructional class for nutritionists detailing proper dietary protocols for enhancing endurance and performance during exercise and sports. Elective.
3 semester hours

NUTRITION 560M

Biostatistics.

A description of analytical approaches for

obtaining and interpreting biological data with emphasis on data analysis in the nutritional sciences. Biological variation, experimental design, data and fact differences, matching analysis to design, integrity in analysis, and bias in design and analysis will be considered in detail.
3 semester hours

NUTRITION 560N

Pathology of Nutritional Diseases.

An in-depth examination of the gross anatomic and histopathologic signs and symptomns of nutrient deficiencies and toxicities. Emphasis will be placed on recognition of anomalies and diagnostic techniques. Extensive slide presentations will be included with the lectures. Elective.
3 semester hours

NUTRITION 560Q

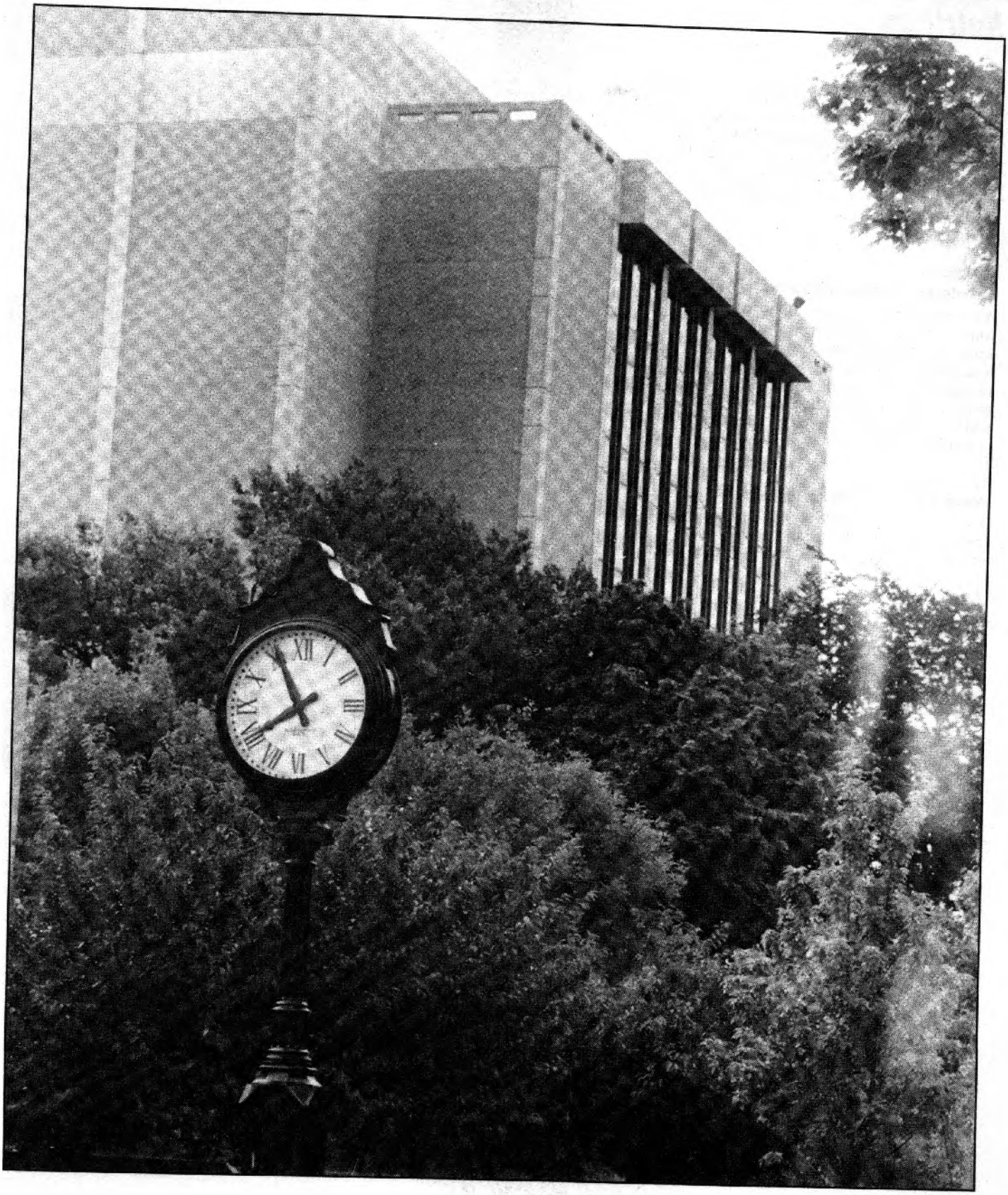
Issues in Nutrition and Health Care.

A comprehensive analysis of the role of nutrition in different health fields, presented by professionals in their respective areas of specialization. Elective.
3 semester hours

NUTRITION 595N

Independent Study.

Opportunity for the graduate student to pursue advanced individual study in his field under the supervision of a specialist. No more than 6 semester hours may be taken in such study. Prerequisite: Permission of the Department Chair.
1-6 semester hours



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The Alumni Association

Alumni of the University of Bridgeport reside in every state of the nation and in most countries around the world. Founded in 1931 with fewer than a dozen members, the Alumni Association has grown to include more than 27,000 members.

Alumni are always welcome when they visit the campus, whether to attend a formal Association event or just to indulge in nostalgia. An active and committed volunteer Board of Directors continues to manage the Association's affairs, with a number of activities planned each year. From art auctions and athletic events to regional receptions and celebrations of alumni achievements, the calendar is very full.

Through our membership in the National Educational Alumni Trust, (NEAT), alumni have access to low-cost group life and supplemental insurance plans as well as temporary medical coverage during times of benefit interruption. In addition, we offer a University of Bridgeport major credit card featuring a low interest rate as well as our University's attractive logo.

A University can only measure its success through the achievements of its alumni. The University of Bridgeport boasts an array of prominent graduates. They serve as corporate CEO's and university presidents, automobile designers, commissioners of education, political leaders, television stars and prominent athletics. Their accomplishments reflect well on their alma mater, which in turn extends its gratitude.

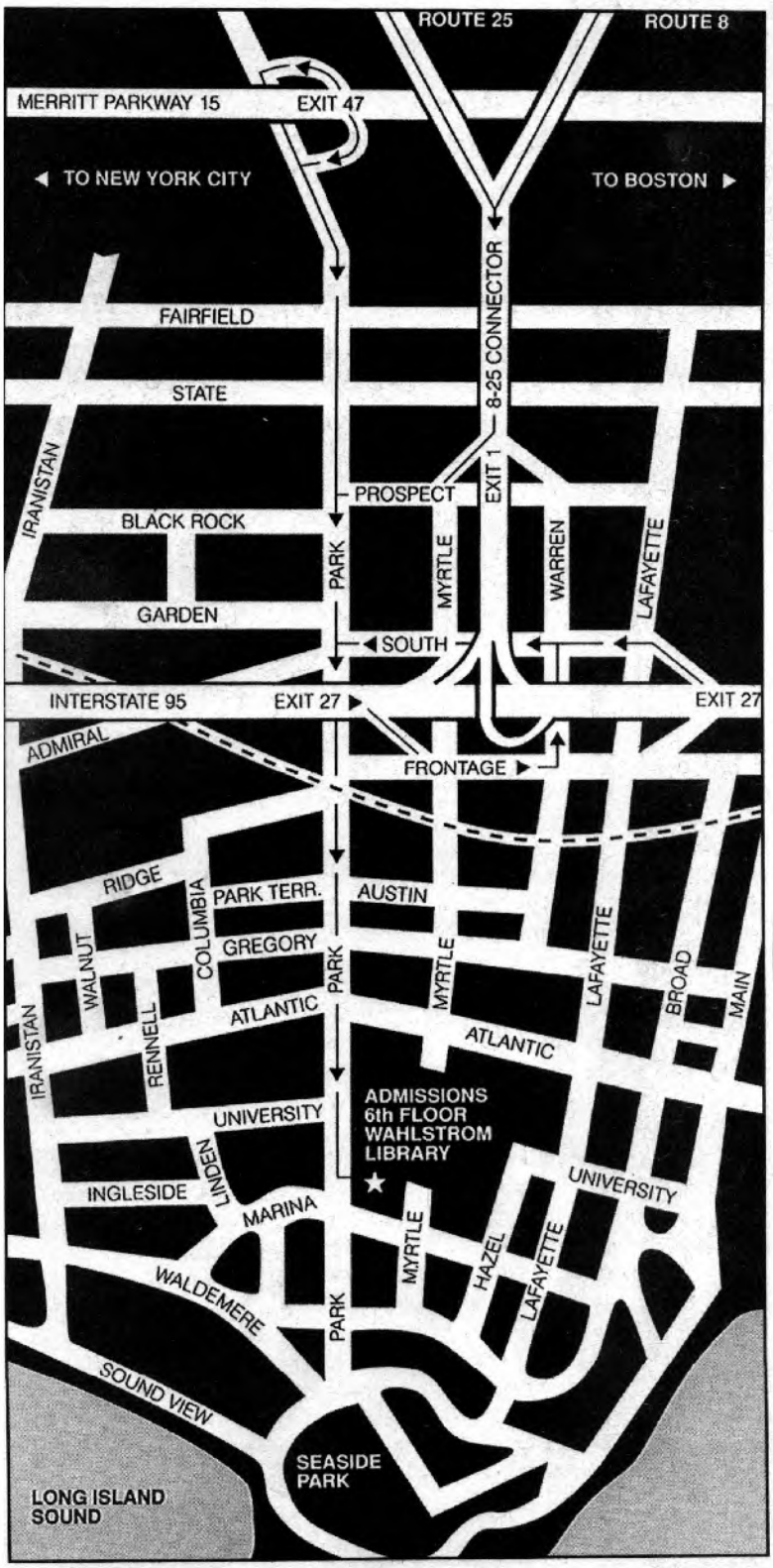
THE STUDENT RIGHT-TO-KNOW AND CAMPUS SECURITY ACTS

The University is in compliance with the Student Right-to-Know Act of 1990 and Campus Awareness and Campus Security Acts of 1990. Reports, disclosures and other data are available in the University's Student Handbook, the Key to U.B., the Campus Public Safety Office and/or other official University publications.

The University of Bridgeport Campus Public Safety Office keeps statistics concerning the occurrence on campus of certain criminal offenses which were reported to them or to the local police. These statistics are published and distributed annually to the entire University of Bridgeport campus community, and to other interested parties.

For further information, contact the Director of Campus Security, Dean of Students, or the University Attorney.

Directions to the University of Bridgeport



The Bridgeport Campus

CONNECTICUT TURNPIKE — EXIT 27

I-95 South: Bear left as the exit ramp divides (the ramp designated as East/South). Parallel I-95 through 3 traffic lights; at the fourth light, turn left onto Park Avenue.

Or I-95 North: At end of the exit ramp, continue straight ahead. Parallel I-95 for one block and turn left onto Warren Street. This is the first legal left you can make. Cross under I-95, and immediately turn left onto North Frontage Road. At the second light, turn left onto Park Avenue.

Proceed South on Park Avenue, approximately one-half mile to the campus.

The Office of Admissions is located on the 6th floor of Wahlstrom Library opposite the light at the intersection of Park and University Avenues.

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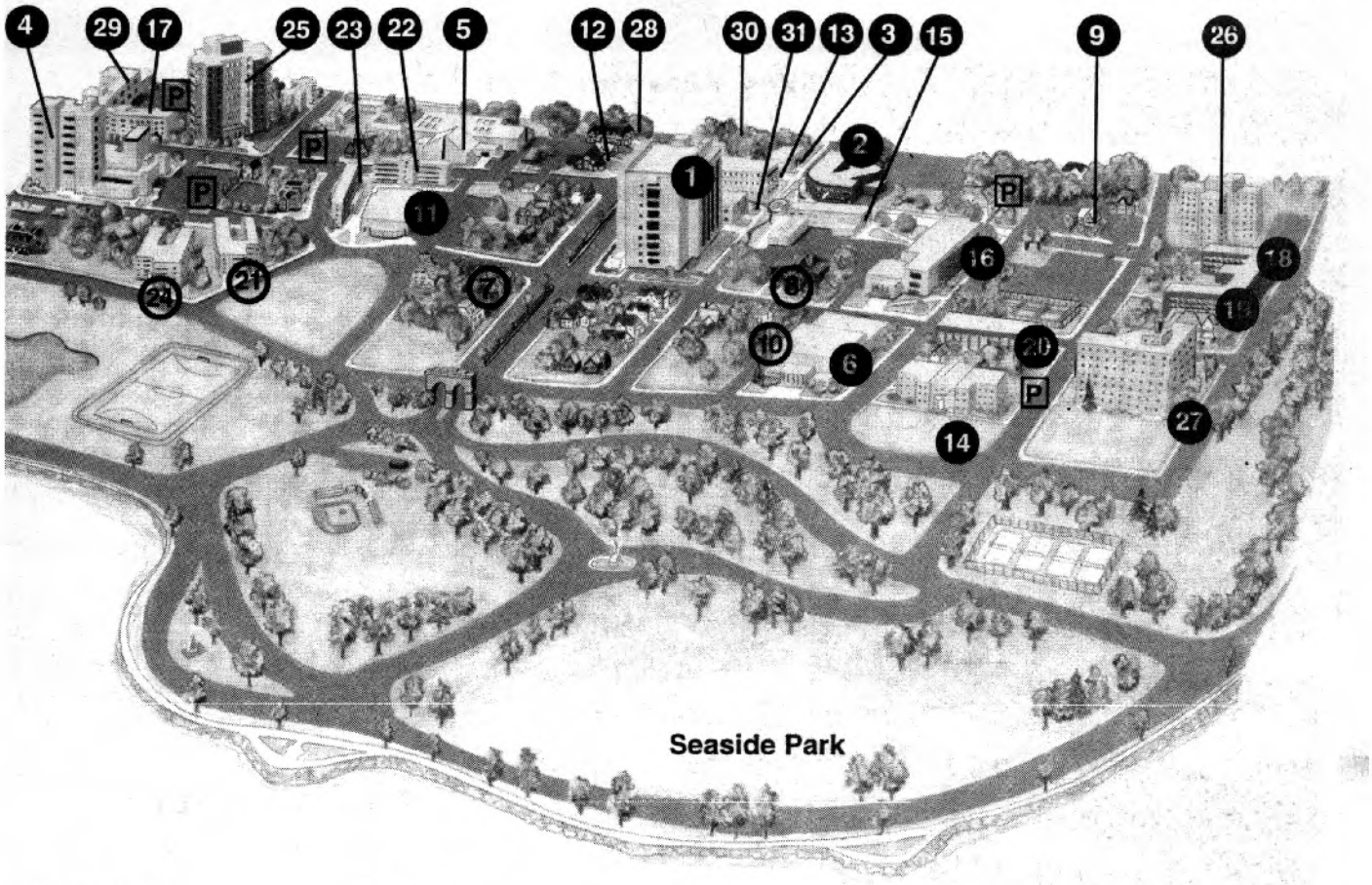
Traveling South, Exit 52: Bear left as the exit ramp divides, proceeding onto Route 8 South. Continue on Route 8 approximately one mile; then take the lane that leads to the Route 8/25 Connector to downtown Bridgeport. Take Exit 1. Turn right at the end of the exit ramp onto Prospect Street. Proceed to Park Avenue. Turn left onto Park Avenue. Proceed South approximately one-half mile to the campus.

Or Traveling North, Exit 47: At end of exit ramp, turn left onto Park Avenue. Proceed South approximately 6 miles to the campus.

The Office of Admissions is located on the 6th floor of Wahlstrom Library opposite the light at the intersection of Park and University Avenues.

Campus Map



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9 Cartensen Hall
20 College of Chiropractic
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16 Dana Hall of Science
14 Edna Naylor Dana Building
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6 Harvey Hubbell Gymnasium
13 Mandeville Hall
11 Marina Dining Hall
10 Newman Center
8 Norseman Hall
18 North Hall
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29 Rennell Hall
19 South Hall
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2 John J. Cox Student Center
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Parking facilities are available at no charge to UB students and community.

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